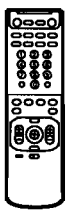
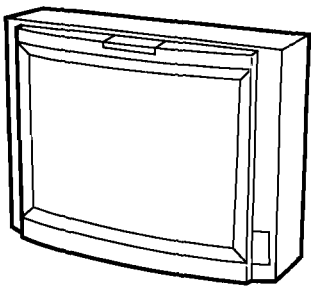
SERVICE MANUAL

AA-2C CHASSIS

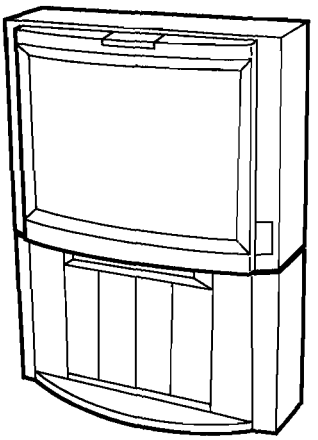
MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-32XBR48	RM-Y144	US	SCC-N29B-A
KV-32XBR48	RM-Y144	Canadian	SCC-N30B-A
KV-34XBR48C	RM-Y144	E	SCC-N31B-A
KV-35XBR48	RM-Y144	US	SCC-N29A-A
KV-35XBR48	RM-Y144	Canadian	SCC-N30A-A
KV-35XBR88	RM-Y144	US	SCC-N29C-A
KV-37XBR48M	RM-Y144	E	SCC-N31A-A



RM-Y144



KV-32XBR48/34XBR48C
KV-35XBR48/37XBR48M



KV-35XBR88

MICROFILM

996583601

TRINITRON® COLOR TV

SONY®

※ Please file according to model size. ..... ■

32 | 34 | 35 | 37

SPECIFICATIONS

	KV-32XBR48	KV-34XBR48C	KV-35XBR48	KV-35XBR88	KV-37XBR48M
Power requirements	120 V, 60 Hz	220 V, 50/60 Hz	120 V, 60 Hz	120 V, 60 Hz	120 V, 60 Hz
Number of inputs / outputs					
Video [1]	3	3	3	3	3
S video[2]	2	2	2	2	2
Audio[3]	4	4	4	4	4
Audio out[4]	1	1	1	1	1
Monitor out[1]	1	1	1	1	1
TV out[1]	1	1	1	1	1
S-Link	YES	YES	YES	YES	YES
Y, B-Y, R-Y[5]	1	1	1	1	1
Speaker output (W)	15W x 2	15W x 2	15W x 2	15W x 2	15W x 2
Power consumption (W)					
in use (Max.)	195W	195W	198W	198W	198W
in standby	15W	17W	15W	15W1	5W
Dimensions (W/H/D)	861 x 652.5 x	861 x 652.5 x	936 x 706.5 x	936 x 1201.5 x	936 x 706.5 x
(mm)	603 mm	603 mm	636.5 mm	697 mm	626.5 mm
(in.)	33 x 25 3/4 x 23 3/4 in.	33 x 25 3/4 x 23 3/4 in.	36 7/8 x 27 7/8 x 24 3/4 in.	36 7/8 47 3/4 x 27 1/2 in.	36 7/8 x 27 7/8 x 24 3/4 in.
Mass (kg)	72 kg	72 kg	90 kg	125 kg	90 kg
(lbs)	158 lbs 12 oz	158 lbs 12 oz	198 lbs 7 oz	276 lbs 0 oz	198 lbs 7 oz

[1] 1 Vp-p, 75 ohms unbalanced, sync negative

[2] Y : 1 Vp-p, 75 ohms unbalanced, sync negative
C : 0.286 Vp-p (Burst signal), 75 ohms

[3] 500 mVrms (100% modulation), Impedance : 47 kilohms

[4] More than 408 mVrms at the maximum volume setting (variable)
More than 408 mVrms (fix)
Impedance : 5 kilohms

[5] Y : 1.0 Vp-p, 75 ohms, sync negative
B-Y : 0.7 Vp-p, 75 ohms
R-Y : 0.7 Vp-p, 75 ohms

Television system
American TV standard

Channel coverage
VHF : 2-13 / UHF : 14-69 / CATV : 1-125

Picture tube
Hi Black Trinitron® tube

Antenna
75 ohm external terminal for VHF / UHF

Visible Screen size
32-inch picture measured diagonally
(KV-32XBR48, 34XBR48C)
35-inch picture measured diagonally
(KV-35XBR48, 35XBR88, 37XBR48M)

Actual Screen size
34-inch picture measured diagonally
(KV-32XBR48, 34XBR48C)
37-inch picture measured diagonally
(KV-35XBR48, 35XBR88, 37XBR48M)

Supplied accessories
Remote control RM-Y144 (1)
Batteries (2) size AA (R6)

Optional accessories
Connecting cables
RK-74A, RKG-69HG, VMC-10HG,
VMC-720M, VMC-810S / 820S. YC-15V / 30V
TV Stand SU-32XBR48
KV-32XBR48, 34XBR48C
TV Stand SU-35XBR48
KV-35XBR48, 37XBR48C
U / V mixer EAC-66

Design and specifications are subject to change without notice.

SRS (●)® (SOUND RETRIEVAL SYSTEM)

The SRS (●)® (SOUND RETRIEVAL SYSTEM) is manufactured by Sony Corporation under license from SRS Labs, Inc. It is covered by U.S. Patent No. 4,748.669. Other U.S. and foreign patents pendeing.

The word 'SRS' and the SRS symbol (●) are registered trademarks of SRS Labs, Inc.

SAFETY CHECK-OUT

(US model only)

After correcting the original service problem, perfom the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, through functioning, show obvious signs of deterioration. Point them out to the customer and recom mend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the condition of the monopole antenna (if any). Make sure the end is not broken off, and has the plastic cap on it. Point out the danger of impalement on a broken antenna to the customer, and recommend the antenna's replacement.
8. Check the B+ and HV to see they are at the values specified. Make sure your instruments are accurate;be suspicious of your HV meter if sets always have low HV.
9. Check the antenna temminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5mA (500 microampers) . Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground;the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60-100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)

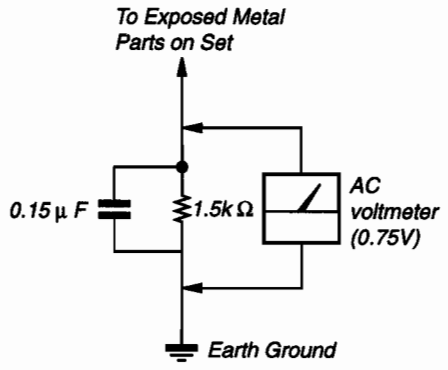


Fig. A. Using an AC voltmeter to check AC leakage.

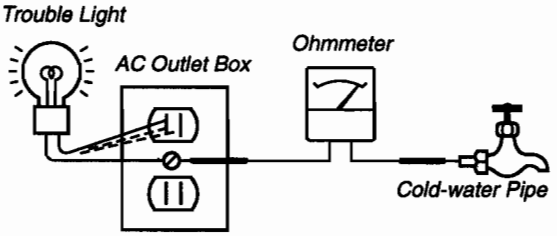


Fig. B. Checking for earth ground.

TABLE OF CONTENTS

(CAUTION)

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.

THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL FOR SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

(ATTENTION)

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION!!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

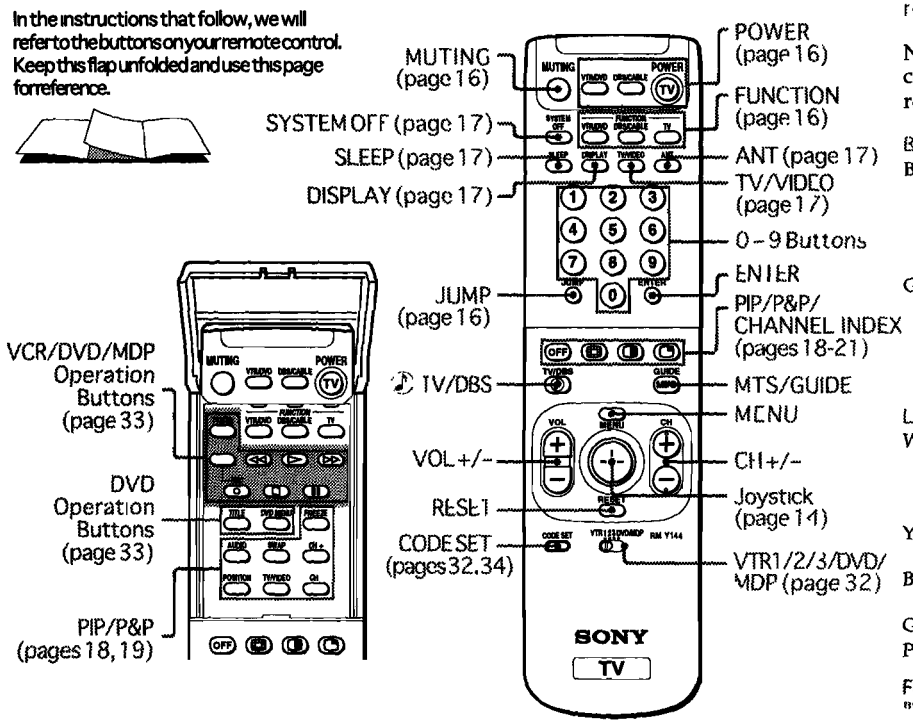
LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE ⚠ SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ ⚠ DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

SECTION 1
GENERAL

The operation instruction mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual. (Part no · 3-860-371-21)

Remote Control

In the instructions that follow, we will refer to the buttons on your remote control. Keep this flap unfolded and use this page for reference.



Getting to know the buttons on the remote control

Names of the buttons on the remote control are presented in different colors to represent the available functions.

Button color

Black .. .. . . Press to select the component you want to control; e.g. VTR (VCR)/MDP/DVD Player, DBS (Direct Broadcast Satellite)/ CABLE, or TV.

Green . . . Buttons relevant to power operations, like turning the TV, DBS (Direct Broadcast Satellite)/ CABLE, or VTR (VCR)/MDP/ DVD Player on or off.

Label color

White . TV/VTR (VCR)/MDP/DVD Player/DBS (Direct Broadcast Satellite)/CABLE operation buttons

Yellow .. PIP, P&P, and CHANNEL INDEX operation buttons

Blue .. DBS (Direct Broadcast Satellite) operation buttons.

Green . .. S-Link operation buttons

Pink .. . . DVD Player operation buttons.

For a detailed explanation of most buttons, see "Watching the TV" on page 16.

Connecting and Installing the TV (continued)

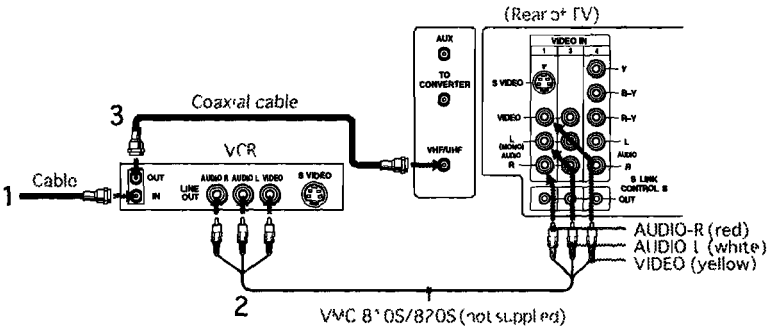
Disconnect all power sources before making any connections.

Connecting an antenna/cable TV system with a VCR

1 Attach the coaxial connector from your cable or antenna to IN on your VCR

2 Using AUDIO/VIDEO connectors, connect AUDIO and VIDEO OUT on your VCR to AUDIO and VIDEO IN on your TV (Yellow-VIDEO, White-AUDIO Left, Red-AUDIO Right).

3 Using a coaxial connector, connect OUT on your VCR to VHF/UHF on your TV



Connecting to an S Video equipped VCR

1 Attach the coaxial connector from your cable or antenna to IN on your VCR.

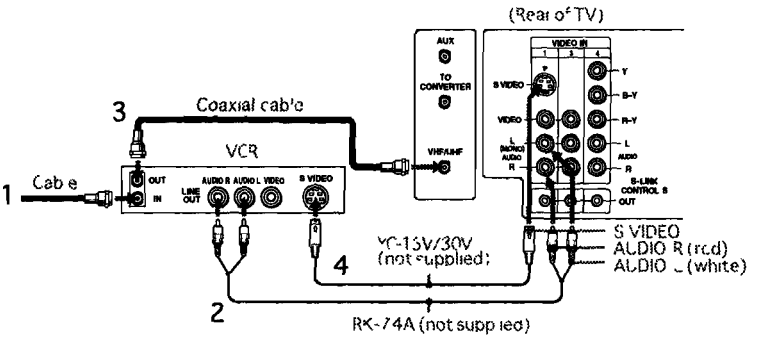
2 Using AUDIO connectors, connect AUDIO OUT on your VCR to AUDIO IN on your TV (White-AUDIO Left, Red-AUDIO Right).

3 Using a coaxial connector, connect OUT on your VCR to VHF/UHF on your TV.

4 Using an S VIDEO connector, connect S VIDEO on your VCR to S VIDEO on your TV

Note:

- If you are connecting a monaural VCR, connect only the single audio output to the left (MONO) input on your TV.



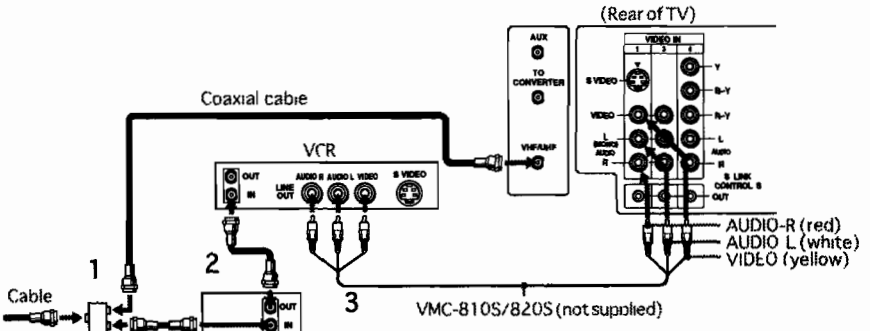
Disconnect all power sources before making any connections.

Connecting a VCR and TV with a cable box

1 Connect the single (input) jack of the Splitter to your incoming cable connection, and connect the other two (output) jacks (using coaxial cable) to IN on your cable box and VHF/UHF on your TV.

2 Using a coaxial connector, connect OUT on your cable box to IN on your VCR

3 Using AUDIO/VIDEO connectors, connect AUDIO and VIDEO OUT on your VCR to AUDIO and VIDEO IN on your TV (Yellow-VIDEO, White-AUDIO Left, Red-AUDIO Right).



Connecting to an S Video equipped VCR with a cable box

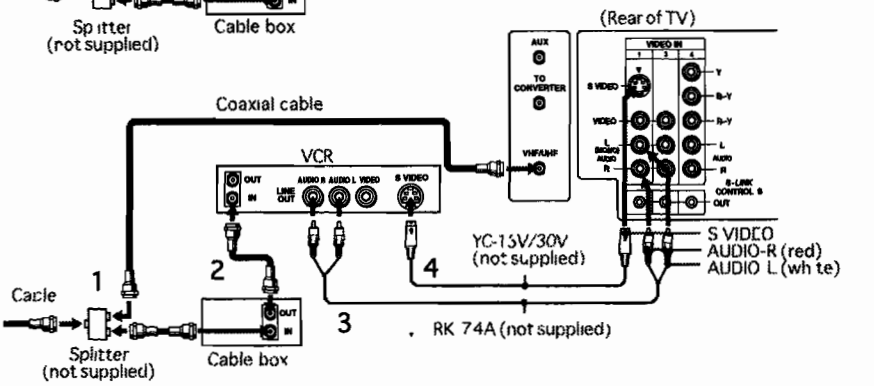
1-2 Perform as described above.

3 Using AUDIO connectors, connect AUDIO OUT on your VCR to AUDIO IN on your TV (White-AUDIO Left, Red-AUDIO Right)

4 Using an S VIDEO connector, connect S VIDEO on your VCR to S VIDEO on your TV

Note:

- To view scrambled channels through your cable box, select the video input which your cable box is connected to by pressing TV/VIDEO



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Connecting and Installing the TV (continued)

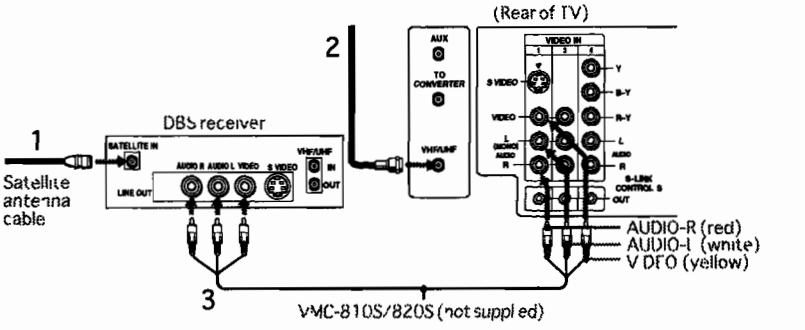
Disconnect all power sources before making any connections.

Connecting a DBS (Direct Broadcast Satellite) receiver

1 Connect the cable from your satellite antenna to your DBS receiver.

2 Attach the coaxial connector from your cable or antenna to VHF/UHF on your TV.

3 Using AUDIO/VIDEO connectors, connect AUDIO and VIDEO OUT on your DBS receiver to AUDIO and VIDEO IN on your TV.



Connecting a DBS (Direct Broadcast Satellite) receiver and a VCR

1 Connect the cable from your satellite antenna to your DBS receiver.

2 Attach the coaxial connector from your cable or antenna to VHF/UHF IN on your VCR.

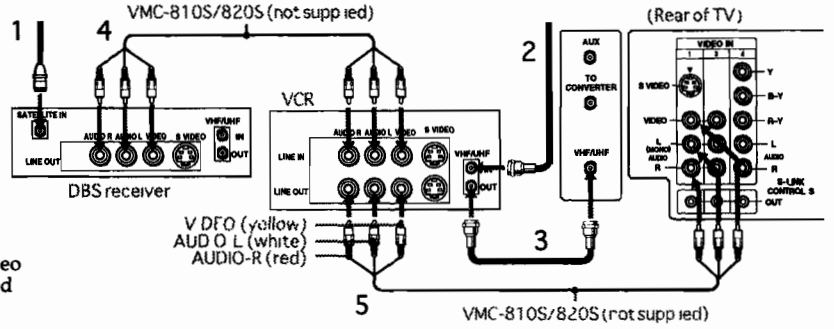
3 Using a coaxial connector, connect VHF/UHF OUT on your VCR to VHF/UHF on your TV.

4 Using AUDIO/VIDEO connectors, connect AUDIO and VIDEO OUT on your DBS receiver to AUDIO and VIDEO IN on your VCR.

5 Using AUDIO/VIDEO connectors, connect AUDIO and VIDEO OUT on your VCR to AUDIO and VIDEO IN on your TV.

Note:

- To view input from the DBS or VCR, select the video input which your DBS receiver or VCR is connected to by pressing TV/VIDEO on the remote control.



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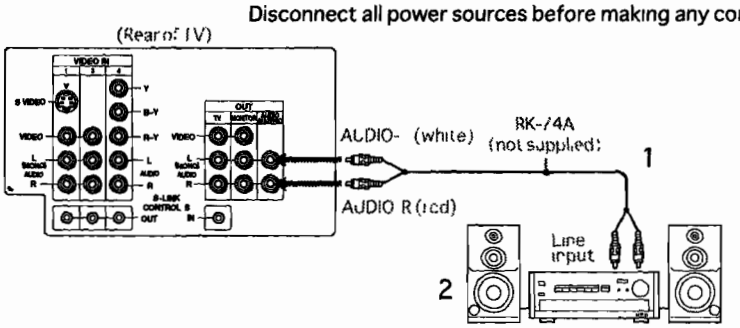
Disconnect all power sources before making any connections.

Connecting an audio system

For more dynamic sound, connect your audio system to your TV.

1 Using AUDIO connectors, connect AUDIO OUT on your TV to one of the unused Line inputs (e.g. Tape-2, AUX1, etc.) on your stereo (White-AUDIO Left, Red-AUDIO Right)

2 Set your stereo to the chosen Line input and use the AUDIO menu to set your audio output. (see "SPEAKER" and "AUDIO OUT" on page 24)



Connecting an AV receiver

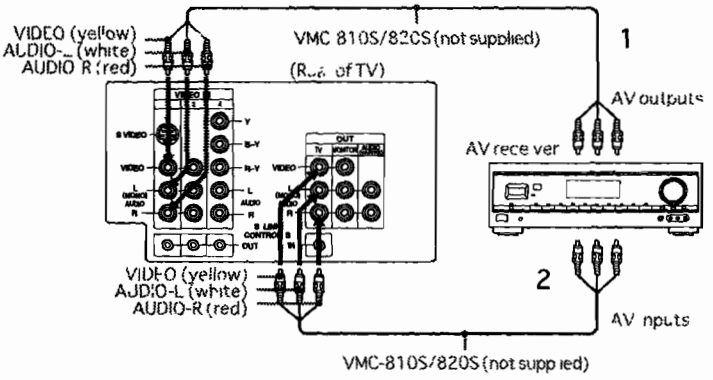
For greater control of all audio and video equipment, connect your AV receiver

1 Using AUDIO/VIDEO connectors, connect VIDEO 1 IN on your TV to Monitor AUDIO and VIDEO OUT on your AV receiver.

2 Using AUDIO/VIDEO connectors, connect TV OUT on your TV to TV AUDIO and VIDEO IN on your AV receiver

Note:

- You may want to use CHANNEL FIX to fix your TV's input to the AV receiver (VIDEO 1). (see "CHANNEL SET UP" on page 26)



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Connecting and Installing the TV (continued)

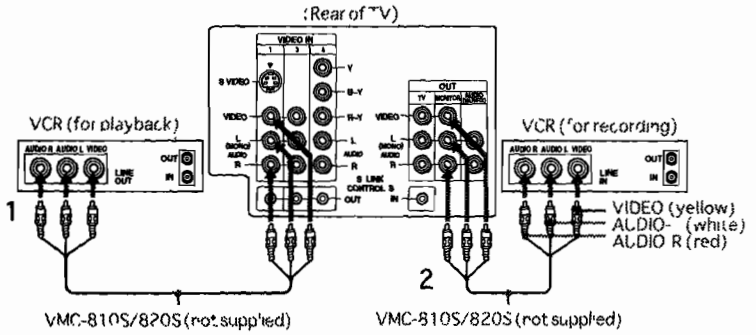
Disconnect all power sources before making any connections.

Connecting two VCRs for tape editing using MONITOR OUT

MONITOR OUT gives you the ability to use a second VCR to record a program being played by the primary VCR or to perform tape editing and dubbing

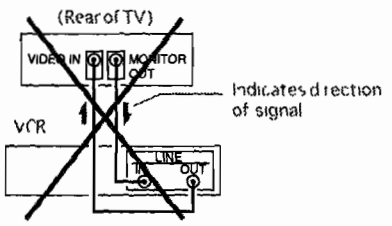
1 Connect the VCR intended for playback using the connection instructions on page 4 of this manual

2 Using AUDIO/VIDEO connectors, connect AUDIO and VIDEO IN on your VCR intended for recording to MONITOR AUDIO and VIDEO OUT on your TV.



Notes:

- Do not change the input signal while editing through MONITOR OUT
- When connecting a single VCR to the TV; if VCR LINE OUT is connected to TV VIDEO IN, **do not** connect the TV MONITOR OUT jacks to the VCR LINE INPUT (see right). Doing so will cause program interference and other viewing problems



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Connecting a DVD Player (Upper illustration)

Using AUDIO/VIDEO connectors, connect VIDEO 1 IN on your TV to LINE OUT on your DVD Player.

Connecting a DVD Player with component video output connectors (Lower illustration)

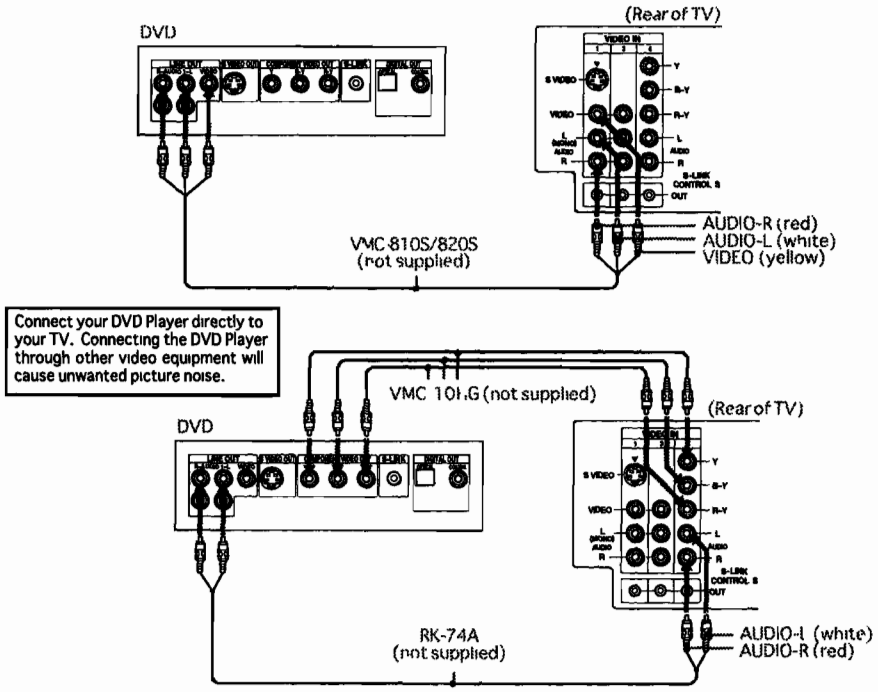
1 Using AUDIO connectors, connect AUDIO R and L of the LINE OUT on your DVD Player to AUDIO R and L on the VIDEO IN 4 panel at the rear of your TV.

2 Using three VIDEO connectors, connect Y, B–Y, and R–Y on the COMPONENT VIDEO OUT on your DVD Player to Y, B–Y, and R–Y on the VIDEO IN 4 panel at the rear of your TV.

Notes:

- Some DVD Player terminals may be labeled Y, Cb, and Cr If so, connect Y (green) to Y, B-Y (blue) to Cb, and R-Y (red) to Cr
- Because the high quality pictures on a DVD disc contain a lot of information, picture noise may appear. In this case, adjust the SHARPNESS in the VIDEO menu (see SHARPNESS on page 23)

Disconnect all power sources before making any connections.



Connecting and Installing the TV (continued)

Connecting a camcorder

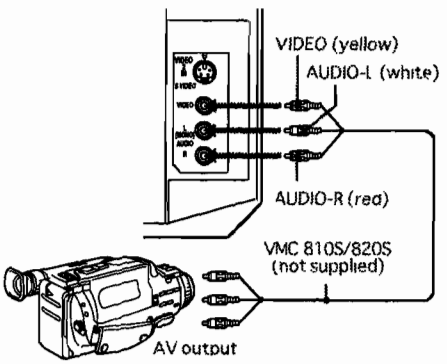
Use this connection to view a picture directly from your camcorder.

Using AUDIO/VIDEO connectors, connect AUDIO and VIDEO OUT on your camcorder to AUDIO and VIDEO IN on the front panel of your TV (Yellow-VIDEO, White-AUDIO Left, Red-AUDIO Right).

Notes:

- If you are connecting a monaural camcorder, connect only the single audio output to the left (MONO) input on your TV
- If you have an S Video equipped camcorder, you can use an S Video connection

Disconnect all power sources before making any connections.



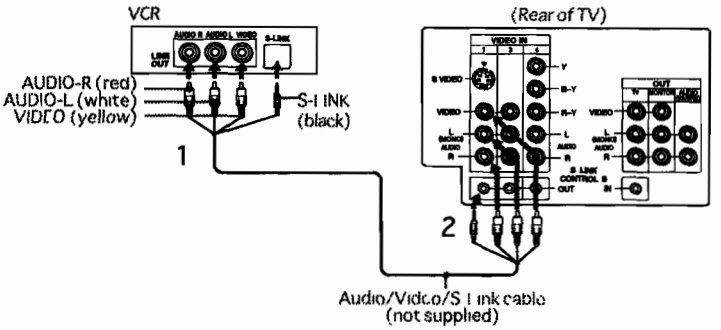
Using the S-Link function

S-Link is a Sony innovation designed to make your Sony components work together. It allows you to automatically switch the TV input mode to video when you press PLAY on your Sony S-Link VCR. It also allows you to turn the VCR and TV off at the same time with the SYSTEM OFF button.

1 Connect your VCR. (see "Connecting an antenna/cable TV system with a VCR" or "Connecting to an S Video equipped VCR" on page 4)

2 Using an S-LINK connector, connect the S-LINK jacks on your VCR and TV. Ensure that both ends are seated firmly and that the TV S-LINK connector is in the same row as the AUDIO/VIDEO connectors.

Disconnect all power sources before making any connections.



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Connecting and Installing the TV (continued)

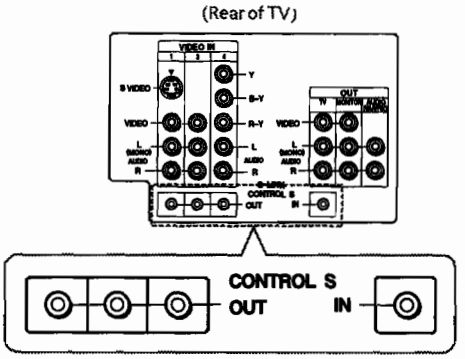
Using the CONTROL S feature

CONTROL S allows you to control your TV and other Sony equipment with one remote control.

To control other Sony equipment with your TV's remote control, connect the CONTROL S IN jack of the equipment to the CONTROL S OUT jack on the TV with the CONTROL S cable.

To control your TV with other Sony equipment's remote control, connect the CONTROL S OUT jack of the equipment to the CONTROL S IN jack on the TV with the CONTROL S cable.

Disconnect all power sources before making any connections.



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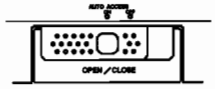
Using the Console Box (KV-35XBR88 only)

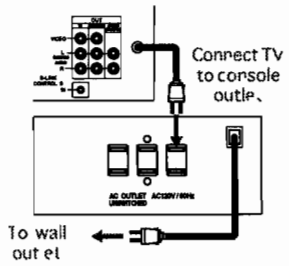
The console box features electronic sliding doors and three AC outlets.

The AUTO ACCESS switch on the front of the console controls operation of the sliding doors.



AC outlets

Your TV cord has been designed to connect to one of the AC outlets on the rear of the console You will have two additional outlets to connect accessory equipment to.



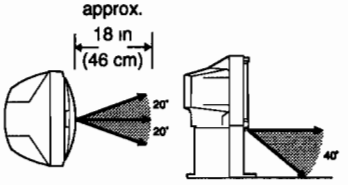
CAUTION

- Do not connect the console AC power cord to a wall outlet until you have completed making all connections
- Do not connect equipment with a combined wattage of more than 300 W/3 A to the console outlet (the wattage of this TV set is 198 W)

Operating your console box automatically (AUTO ACCESS ON)

When the AUTO ACCESS switch is set to ON, the doors will operate automatically. Whenever the sensor detects movement within its range, the doors will open and remain open until the range is clear.

Refer to the following diagram to determine the range of the automatic feature



Notes:

- People with small children and pets should consider using the manual feature to avoid possible injury and/or damage.
- The ultrasonic sensor may detect movement, drafts, vibrations, sound waves, or electronic signals that will cause the doors to open inadvertently.
- If the travel of the doors is interrupted, they will reopen automatically and remain opened When you want to close the doors again, press the OPEN/CLOSE button (or set the AUTO ACCESS switch to OFF)

Operating your console box manually (AUTO ACCESS OFF)

When the AUTO ACCESS switch is set to OFF, the doors will operate manually. Pressing on the OPEN/CLOSE button will cause the doors to open or close and remain in that position until the switch is pressed again.

Basic Set up

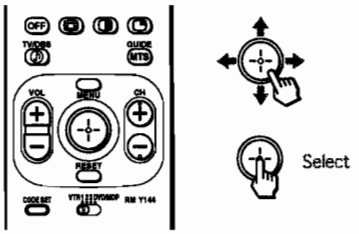
Inserting Batteries

Insert two size AA (R6) batteries (supplied) by matching the + and – on the batteries to the diagram inside the battery compartment.

Notes:

- Remove the batteries to avoid damage from possible battery leakage whenever you anticipate that the remote control will not be used for an extended period.
- Handle the remote control with care Avoid dropping it, getting it wet, or placing it in direct sunlight, near a heater, or where the humidity is high.
- Your remote control can be programmed to operate most video equipment. (see "Operating Video Equipment" on page 32)

Using the Remote Control Joystick



The supplied remote control has a joystick which allows for movement of the on-screen selector in four directions. Pressing up, down, left, or right on the joystick will cause the selector to *move* in the selected direction Pressing down on the center of the joystick (⊕) will *activate* the selected item.

Adjusting Sliders

When menu items present a slider (▬● or ●▬), press up, down, left, or right on the joystick to adjust the setting

On Line Help/Instructions

Several menu windows will provide prompts and instructions to assist you in navigating through the different functions.

When the instructions are presented, use them to supplement the instructions in this manual.

Setting Up the TV Automatically

The EASY SETUP GUIDE feature will allow you to set the on-screen language and set all receivable channels. The EASY SETUP GUIDE screen will appear every time you turn on the TV until you perform AUTO PROGRAM.

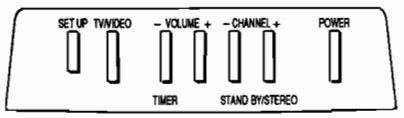
The EASY SETUP GUIDE feature does not apply for installations that use a cable box for all channel selection.

You can also set up the TV manually. (see "Using the SET UP menu" on page 26)

Tips

- Perform this function during the day, with the antenna and/or cable properly connected, to ensure that all available channels will be broadcasting and receivable
- After using EASY SETUP GUIDE you will still have the option of adjusting any of the system settings, like erasing channels, through the SET UP menu *(see "CHANNEL SET UP" on page 26)*

Using the buttons on the top of the TV·



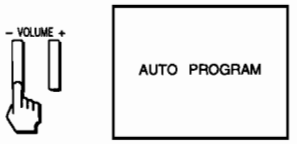
1 Press POWER to turn on the TV
The EASY SETUP GUIDE screen appears

2 Press CHANNEL + to select ENGLISH, CHANNEL – to select ESPAÑOL or VOLUME + to select FRANÇAIS.

The screen will change to reflect your choice

For a DEMO of functions and menus, press TV/VIDEO

3 Press VOLUME – to continue.



"AUTO PROGRAM" appears and the TV starts scanning and presetting channels automatically. When all the receivable channels are stored, the lowest numbered channel is displayed If the TV receives cable TV channels, CABLE is set to ON automatically

To perform AUTO SET UP again

- Press SET UP on top of the TV.
- Press CHANNEL +, CHANNEL – or VOLUME + to select a language
- Press VOLUME – to restore factory settings ("CONTINUE TO AUTO PROGRAM?" will appear on the screen) Press CHANNEL+ to execute or CHANNEL– to exit.
- Press SET UP to exit

Notes:

- Before you perform AUTO SET UP again, make sure that the input from ANT (not AUX) is selected by pressing ANT until "AUX" does not appear next to the channel number
- When you perform AUTO PROGRAM, your CHANNEL FIX, TIMER, and CHANNEL BLOCK settings will be erased

Watching the TV

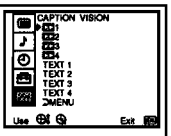
Many TV features can be accessed directly through the remote control. The following chart will explain the function of some buttons found on your remote control

REFER TO THE ILLUSTRATION OF THE REMOTE CONTROL ON THE INSIDE FRONT COVER OF THIS MANUAL AS YOU REVIEW THIS CHART

Using the White Labeled Buttons for TV Operations.	
TV (FUNCTION)	Activates the remote control for use with the TV.
TV POWER	Turns the TV on and off If a video input indication (e.g., VIDEO 1, VIDEO 2) appears on the screen, press TV/VIDEO until a channel number appears
⓪-⑨ and ENTER	Use for direct channel selection Press 0-9 to select a channel (for example, to select channel 10, press 1 and 0), the channel will change after 2 seconds, or you can press ENTER for immediate selection.
CH +/–	Press to scan through the channels (+ up or – down)
VOL +/–	Press to adjust the volume (+ up or – down).
JUMP	Press to alternate or *jump* back and forth between two channels The TV will jump between the current channel and the last channel selected using the 0-9 buttons
MUTING	Press to mute the sound ("MUTING" will appear on the screen) Press again or press VOL + to restore sound
FREEZE *(yellow labeled button)*	Press to *freeze* the picture Press again or press (OFF) to cancel

Using the White Labeled Buttons for TV Operations.	
SLEEP	Press repeatedly until the TV displays the approximate time in minutes (30, 60, or 90) that you want the TV to remain on before shutting off automatically Cancel by pressing until "SLEEP OFF" appears
DISPLAY	Press repeatedly to step through available displays: **Status** Channel number, current time, channel caption (if set), and MTS mode (if SAP is selected) are displayed SAP indication disappears after three seconds. **XDS** XDS (Extended Data Service) shows a network name, program name, program type, program length, program description, call letters, and time of the show if the broadcaster offers this service. **Caption Vision** Caption Vision will be displayed on the screen if the broadcaster offers this service. (see right) To cancel the display, press DISPLAY repeatedly until "DISPLAY OFF" appears. "DISPLAY OFF" disappears after three seconds
TV/VIDEO	Press repeatedly to step through available video inputs. **TV, VIDEO 1, VIDEO 2, VIDEO 3 and VIDEO 4** If you select SKIP as a VIDEO LABEL in the SET UP menu, your TV will skip the video input you selected. (see "VIDEO LABEL" on page 27)
ANT *(AUX input)*	Press to change between the VHF/UHF input and the AUX input. (For detailed connection information, see "Cable box and cable" or "Cable and antenna" on page 3)
MTS	Press to cycle through the Multi-channel TV Sound (MTS) options. (see "MTS" on page 24)
SYSTEM OFF *(green labeled button)*	Press to turn off the TV and all other equipment connected with S-Link (see "Using the S-Link function" on page 11)

CAPTION VISION
(Closed Caption)



Some programs are broadcast with Caption Vision. To display Caption Vision, select CC1, CC2, CC3, CC4, TEXT1, TEXT2, TEXT3, or TEXT4 from the menu, then press DISPLAY until Caption Vision is displayed.

CC1, CC2, CC3, or CC4 shows you a caption, that is, a printed version of the dialogue or sound effects of a program. (The mode should be set to CC1 for most programs) TEXT1, TEXT2, TEXT3, or TEXT4 shows you text, that is, information presented, using half of the screen It is not usually related to the program.

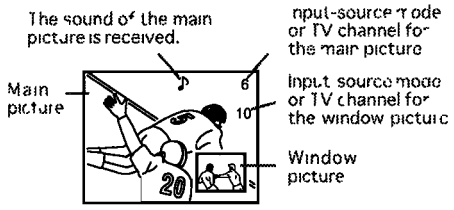
Notes:

- Poor reception of TV programs can cause errors in Caption Vision and XDS. Captions may appear with a white box or other errors instead of intended text
- XDS, Caption Vision, and the status display cannot be used at the same time

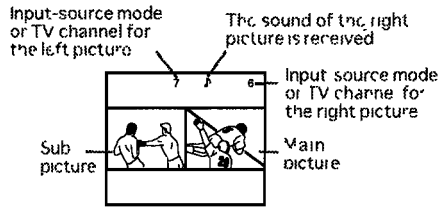
Using your New TV (continued)

Watching Two Programs at One Time — PIP/P&P (Twin View™)

The Picture-in-Picture (PIP) feature allows you to view two channels simultaneously, one in the full size "main" picture and one in a smaller "window" picture.



The Picture-and-Picture (P&P) feature allows you to view two channels simultaneously, both in a reduced size screen The main picture will appear on the right



REFER TO THE ILLUSTRATION OF THE REMOTE CONTROL ON THE INSIDE FRONT COVER OF THIS MANUAL AS YOU REVIEW THIS CHART

Using the Yellow Labeled Buttons for PIP Operations. Some control buttons for PIP and P&P are located under the cover on the top of the remote control.	
	Press to display a window picture (PIP) Each time you press, the picture size will change (1/4 →1/9 →1/16). Press (OFF) to remove the window picture.
	Press to display right (main) and left pictures (P&P) Press (OFF) to cancel
TV/VIDEO	Press repeatedly to step through available video inputs **TV, VIDEO 1, VIDEO 2, VIDEO 3 and VIDEO 4** PIP will display the video source in the window picture P&P will display the video source in the left picture
AUDIO	Press to alternate sound between the main picture and the window picture for PIP and the right and left picture for P&P. The symbol " ♪ " will appear for a few seconds to indicate which picture's sound is being received

Using the Yellow Labeled Buttons for PIP Operations	
CH + / CH –	Press to change the TV channel in the secondary picture (+ to increase the channel number and – to decrease). For PIP, the channel in the window picture will change For P&P, the channel in the left picture will change
POSITION	Press to move the location of the window picture around the main picture *This function works only for PIP*
FREEZE	Great for copying down phone numbers, addresses, recipes, etc For PIP: Press to freeze the main picture and remove the window picture. Press PIP or FREEZE to resume PIP viewing Press (OFF) to cancel and resume normal TV viewing For P&P Press to freeze both pictures Press again to resume P&P viewing or press (OFF) to cancel and resume normal TV viewing.
SWAP	Press to switch the audio and video of the main picture and the window picture for PIP, or between the left and right pictures for P&P. Each time you press SWAP, the picture and sound of the two will be exchanged
▣	Press to access CHANNEL INDEX for direct channel selection (see "Using CHANNEL INDEX" on page 20)
(OFF)	Press to cancel PIP or P&P functions and return to normal viewing.

Notes:

- The channel being received through the AUX jack cannot be displayed as a window picture
- If one of the pictures received through PIP/P&P is snowy, the entire screen may appear snowy. In this case, erase the snowy channel (see "CHANNEL ERASE/ADD" on page 26)

Using CHANNEL INDEX

You can use the CHANNEL INDEX feature to display multiple channels for direct selection

Channels used for CHANNEL INDEX will come directly from the TV's list of receivable channels (those set during AUTO PROGRAM or through the SET UP menu).

1 Press ▣ once to display the current channel in the center of the screen surrounded by the first twelve receivable channels.

A yellow frame will appear to indicate current channel selection

2 When you find a channel that you wish to view, use the joystick to move the yellow frame to that picture and press ⊕.

The selected channel will be retrieved and displayed for normal viewing

Notes

- You cannot move the yellow frame until all of the surrounding pictures appear.
- The TV will continually update each of the surrounding pictures while the CHANNEL INDEX screen is displayed
- Sound will only be heard from the center picture while the CHANNEL INDEX screen is displayed
- If one of the pictures received through CHANNEL INDEX is snowy, the entire screen may appear snowy In this case, erase the snowy channel using CHANNEL ERASE/ADD. (see "CHANNEL SET UP" on page 26)

Using the Yellow Labeled Buttons for CHANNEL INDEX Operations. Some control buttons are located under the cover on the top of the remote control.	
	Press to access CHANNEL INDEX. Press again to access the next twelve receivable channels
CH + CH –	Press to cycle through the receivable channels one at a time
OFF	Press to cancel the current operation and return to normal TV viewing
FREEZE	Press to freeze the center picture. Press again to cancel the frozen picture and resume normal center picture viewing
Using the White Labeled Buttons for Center Picture Operations.	
TV/VIDEO	Press to cycle the center picture through the video inputs. The surrounding channels will not change.
ANT	Press to replace the center picture with a channel received through the AUX input Press again to return to CATV input
CH or 0-9 or JUMP and ENTER	Press to select the channel for the center picture. (see "Watching the TV" on pages 16-17)

REFER TO THE ILLUSTRATION OF THE REMOTE CONTROL ON THE INSIDE FRONT COVER OF THIS MANUAL AS YOU REVIEW THIS CHART

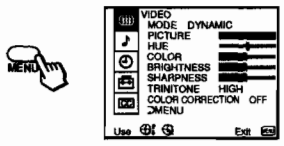
Adjusting your SET UP (menus)

Learning Menu Selection

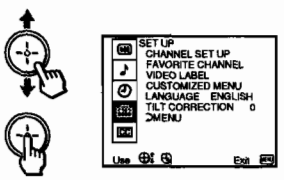
Use the MENU button to access a menu and use the joystick to alter settings. Use the following example to learn how to modify settings.

1 Press the MENU button

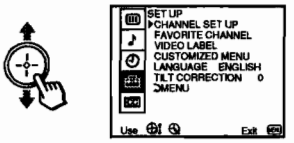
The main menu appears.



2 Press up or down on the joystick to highlight the desired menu and press ⊕ to activate it.

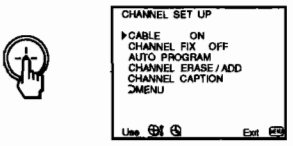


3 Press up or down on the joystick until the cursor points to the desired option.



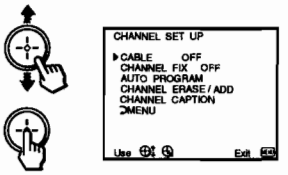
4 Press ⊕.

Options for your selection will be displayed

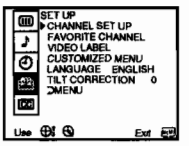


5 Press up or down on the joystick to make your selection and and press ⊕ to activate it

The previous screen will reappear.



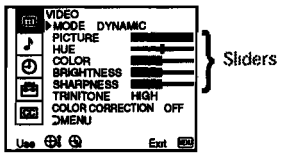
When you are done with changes to the selected menu, choose MENU to return to the main menu. Once you have completed all menu corrections, press MENU on the remote control to exit the menu screens.



Note:

- Pressing MENU on the remote control will allow you to exit from the menus at any time

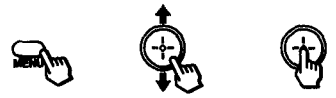
Using the VIDEO Menu



For detailed information on using the remote control to modify menu settings, refer to "Learning Menu Selection" on page 22.

To select the VIDEO menu:

Display → Highlight → Select



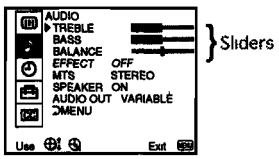
To restore the factory settings

Press RESET on the remote control while the VIDEO menu is selected.

MODE *Customized picture viewing*	**DYNAMIC:** Select for enhanced picture contrast and sharpness **STANDARD:** Select to display a standard picture. **MOVIE:** Select to display a finely detailed picture **SPORTS:** Select to display a vivid, bright picture You can alter the VIDEO menu settings (e g., PICTURE, HUE) for each MODE. Select each mode individually and then press RESET to restore factory settings.
PICTURE *Picture Adjustment*	Adjust slider right (up) to increase picture contrast and create more vivid color. Adjust slider left (down) to decrease picture contrast and soften the color.
HUE *Picture Adjustment*	Adjust slider right (up) to increase the green tones. Adjust slider left (down) to decrease the green tones.
COLOR *Picture Adjustment*	Adjust slider right (up) to increase color intensity. Adjust slider left (down) to decrease color intensity.
BRIGHTNESS *Picture Adjustment*	Adjust slider right (up) to brighten the picture. Adjust slider left (down) to darken the picture
SHARPNESS *Picture Adjustment*	Adjust slider right (up) to sharpen the picture Adjust slider left (down) to soften the picture.
TRINITONE *White Intensity Adjustment*	**HIGH:** Select to give the white colors a blue tint **MEDIUM:** Select to give the white colors a white tint **NTSC STD:** Select to give the white colors a red tint
COLOR CORRECTION *Color Ratio Adjustment*	Select **ON** to emphasize reds and blues. Select **OFF** to emphasize greens

Adjusting your SET UP (menus) (continued)

Using the AUDIO Menu



For detailed information on using the remote control to modify menu settings, refer to "Learning Menu Selection" on page 22.

To select the AUDIO menu:

Display → Highlight → Select

To restore the factory settings

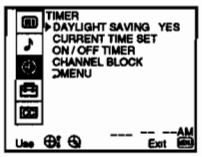
Press RESET on the remote control while the AUDIO menu is selected.

Tip

Press for direct selection of an EFFECT setting.

TREBLE *Sound Adjustment*	Adjust slider right (up) to increase high pitched sounds. Adjust slider left (down) to decrease high pitched sounds.
BASS *Sound Adjustment*	Adjust slider right (up) to increase low pitched sounds Adjust slider left (down) to decrease low pitched sounds.
BALANCE *Sound Adjustment*	Adjust slider right (up) to emphasize right speaker volume Adjust slider left (down) to emphasize left speaker volume.
EFFECT *Customize sound effect based on the program's audio type*	**AUTO SRS:** Automatically detects signal type and switches the TV effect between SRS and SIMULATED **SRS:** Produces a dynamic three dimensional sound for stereo signals. **SIMULATED:** Adds a surround-like effect to mono programs **OFF:** Normal stereo or mono reception
MTS *Enjoy stereo bilingual and mono programs*	**STEREO:** Select for stereo reception when viewing a program broadcast in stereo. **SAP:** Select to listen to a bilingual broadcast (non-SAP programs will be muted when this feature is selected) **MONO:** Select for mono reception (use to reduce noise during stereo broadcasts) ***Quick MTS access:*** *Press MTS on your remote control to cycle through the MTS options as follows: (STEREO → SAP → MONO → STEREO)*
SPEAKER *Custom selection of audio output source*	**ON:** Select to listen to the sound from the TV speakers alone or the TV speakers and a separate stereo system **OFF:** Select to turn off the TV speakers and listen to the TV's sound only through external audio system speakers
AUDIO OUT *Easy control of volume adjustments*	AUDIO OUT can only be set when speakers are set to OFF. **VARIABLE:** Sound output varies according to the TV settings. VOLUME, BASS, TREBLE, and BALANCE are adjusted through the TV. Useful when you want to use your remote control to control the output of a separate audio system **FIXED:** Sound output is held at a fixed level VOLUME, BASS, TREBLE, and BALANCE are fixed to the factory settings. VOLUME adjustments are made through your stereo

Using the TIMER Menu



After setting the clock you can use the timer to turn the TV on and off.

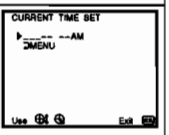
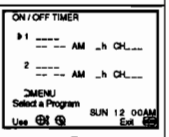
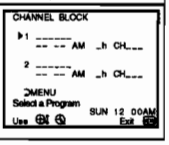
For detailed information on using the remote control to modify menu settings, refer to "Learning Menu Selection" on page 22.

To select the TIMER menu:

Display ➡ Highlight ➡ Select

Tip

Set daylight saving time before setting the clock. Any loss of power will cause these settings to be erased

DAYLIGHT SAVING *Automatically adjusts the time*	**Spring:** Select YES to compensate for Daylight Saving Time The current time automatically moves ahead one hour **Fall:** Select NO at the end of Daylight Saving Time The current time moves back one hour.
CURRENT TIME SET *Necessary for the TIMER*	 **1** Press ⊕, then press up or down on the joystick until the current day (MON-SUN) is displayed, and press ⊕ **2** Press up or down on the joystick until the current hour (01-12) and AM/PM is displayed, and press ⊕ **3** Press up or down on the joystick until the current minute (00-59) is displayed, and press ⊕. The Clock has now started. Press MENU to exit
ON/OFF TIMER *Wake up or scheduled viewing*	 **1** Select the desired timer (1 or 2). **2** Press up or down on the joystick until the desired day (MON-SUN) or range of days (EVERY SUN-SAT or EVERY MON-FRI) is displayed, and press ⊕ **3** Press up or down on the joystick until the time (hours and minutes) that you want the TV to remain on is displayed, and press ⊕ **4** Press up or down on the joystick to set the time duration (maximum of 6 hours) and press ⊕. **TO CANCEL THE TIMER FUNCTION, PRESS RESET.** **5** Press up or down on the joystick to select the desired channel and press ⊕ The timer is now set. The TIMER indicator on your TV will be lit. Press MENU to exit. Performing AUTO PROGRAM will erase all TIMER settings.
CHANNEL BLOCK *Prevent access to certain channels*	 You will be able to block two channels for a period of up to 12 hours **FOLLOW STEPS 1-5 OF "ON/OFF TIMER" ABOVE** To erase your CHANNEL BLOCK settings, press RESET while in the CHANNEL BLOCK window. Performing AUTO PROGRAM will erase your CHANNEL BLOCK settings.

Adjusting your SET UP (menus) (continued)

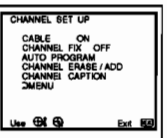
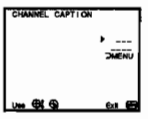
Using the SET UP Menu

For detailed information on using the remote control to modify menu settings, refer to "Learning Menu Selection" on page 22.

To select the SET UP menu:

Display ➡ Highlight ➡ Select

If any menu items are "grayed out", press the ANT button on your remote control so that a channel number appears.

CHANNEL SET UP *Basic set up options for viewing*	 With the CHANNEL SET UP window open: **1** Use the joystick to select the feature you want to change. **2** Press ⊕ to access the feature **CABLE:** Select ON if your TV is connected to a cable system. (AUTO SET UP will set CABLE to OFF automatically if a cable channel is not available) **CHANNEL FIX:** Press up or down on the joystick to set the TV's input to one of the following options: **2-6:** When the cable box is connected to the VHF/UHF input and you do not want to switch to AUX mode. Press DBS/CABLE (FUNCTION) and then CH +/– to change channels. **AUX 2-6:** When a cable box is connected to AUX and a cable or antenna is connected to VHF/UHF. You can alternate between the two inputs by pressing ANT **VIDEO 1:** When you have connected video equipment (e.g. AV receiver) and you want the TV input fixed to it. You will be able to alternate between video sources. **OFF:** When you want to switch CHANNEL FIX off If the TV is in the AUX mode when you turn CHANNEL FIX off, press ANT to return to regular (CATV) mode. *TIMER and CHANNEL BLOCK settings are erased when CHANNEL FIX is set* **AUTO PROGRAM:** Signals the TV to automatically program all receivable channels **CHANNEL ERASE/ADD:** With the CHANNEL ERASE/ADD window open  **1** Place the cursor next to ERASE or ADD **2** Select the desired channel using CH+/–, or by selecting with the 0-9 buttons and pressing ENTER **3** Press ⊕ **CHANNEL CAPTION:** With the CHANNEL CAPTION window open:  **1** Press ⊕ and then press up or down on the joystick to select the desired channel, and press ⊕ again **2** Press up or down on the joystick to display the first letter or number of the caption and press ⊕ to select it (Repeat until up to four digits are selected) **3** Press ⊕. *To erase a Caption, press RESET*

FAVORITE CHANNEL *User's favorite channels*	The FAVORITE CHANNEL feature provides a multi-picture presentation to enable direct channel selection. (for details on how to set up this feature, see "Setting and Selecting FAVORITE CHANNEL" on page 28)
VIDEO LABEL *Easy recognition of connected equipment (e.g. DBS, VHS, etc.)*	This feature allows you to label each input mode so that you can easily identify the connected equipment (e.g. you can label VIDEO 1 IN as VHS). **1** Press up or down on the joystick to select the input mode you want to label and press ⊕ **2** Press up or down on the joystick to select the label and press ⊕. **VIDEO LABEL Options:** VIDEO 1: VHS, 8mm, BETA, LD, GAME, DBS, DVD, WEB, RECEIVER, SKIP VIDEO 2/3: VHS, 8mm, BETA, LD, GAME, DBS, DVD, WEB, SKIP VIDEO 4: DVD, SKIP *If you select SKIP, your TV will skip this connection when you scan through video sources using the TV/VIDEO button. When VIDEO LABEL is set to WEB, the screen will darken, creating an ideal picture for WebTV viewing.*
CUSTOMIZED MENU *Frequently used menu items*	Use this feature to create a custom menu which contains only those functions that you use most. (for details on how to set up this feature, see "Customizing the Menu" on page 31)
LANGUAGE *User's preferred language*	Select from available languages to display all menus in your language of choice
TILT CORRECTION *Adjust your picture*	(KV-35XBR48, 35XBR88, 37XBR48M only) Use this feature to correct any tilt of the picture. Press up or down on the joystick to select a correction between +5 and –5 and press ⊕.

Adjusting your SET UP (menus) (continued)

Setting and Selecting FAVORITE CHANNEL

The FAVORITE CHANNEL feature provides a multi-picture presentation to enable direct channel selection

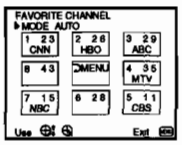
Your FAVORITE CHANNEL options can be set automatically or manually.

The factory setting for FAVORITE CHANNEL is AUTO. When FAVORITE CHANNEL is set to AUTO, the last eight channels selected with the 0-9 buttons will be set as FAVORITE CHANNEL options.

Setting FAVORITE CHANNEL manually

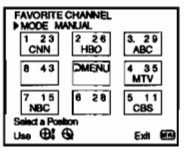
1 Select FAVORITE CHANNEL from the SET UP menu.

The FAVORITE CHANNEL menu will appear If you set CHANNEL CAPTION, captions (e.g. CNN, HBO) for the channels selected will display (see "CHANNEL CAPTION" on page 26)



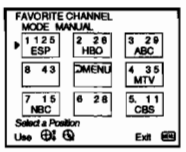
2 Select MODE and press ⊕.

Press up or down on the joystick to display MANUAL and press ⊕.



3 Press down on the joystick to select 1 and press ⊕.

Press up or down on the joystick to select a channel and press ⊕



You have now selected a favorite channel for position 1

4 Use the joystick to select other FAVORITE CHANNEL positions and program other favorite channels

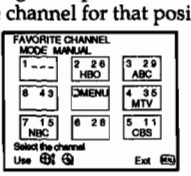
5 Press MENU when you are done.

Your favorite channels are now ready to use.

Resetting FAVORITE CHANNEL choices

You have the option of returning to the FAVORITE CHANNEL screen to adjust any of your favorite channel choices.

Simply proceed as described in "Setting FAVORITE CHANNEL manually" (skip step 2 if MANUAL is already selected). When you reach step 3, select the position you want to change and press ⊕. Press RESET to clear the channel for that position



Press up or down on the joystick to select a new channel and press ⊕
Press MENU when you are done.

Note:

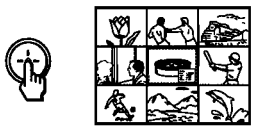
- The FAVORITE CHANNEL feature is not available for the AUX input.

Using FAVORITE CHANNEL

You can use the FAVORITE CHANNEL feature to display multiple channels for direct selection.

1 Press ⊕ once.

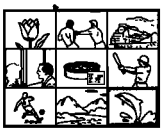
The current channel will be displayed in the center of the screen surrounded by your eight favorite channels.



A yellow frame will appear to indicate current channel selection The TV will continually update each of the surrounding pictures

2 When you find a channel that you wish to view, use the joystick to move the yellow frame to that picture.

The sound of the picture surrounded by the yellow frame will be received



3 Press ⊕ to select the channel.

The selected channel will be retrieved and displayed for normal viewing

Notes:

- You cannot move the yellow frame until all of the surrounding pictures appear.
- If one of the pictures received through FAVORITE CHANNEL is snowy, the entire screen may appear snowy. In this case, erase the snowy channel using CHANNEL ERASE/ADD. (see "CHANNEL SET UP" on page 26)

Adjusting your SET UP (menus) (continued)

Setting and Selecting FAVORITE CHANNEL (continued)

REFER TO THE ILLUSTRATION OF THE REMOTE CONTROL ON THE INSIDE FRONT COVER OF THIS MANUAL AS YOU REVIEW THIS CHART

Using the Yellow Labeled Buttons for FAVORITE CHANNEL Operations. Some control buttons are located under the cover on the top of the remote control.	
FREEZE	Press to freeze the center picture Press again to cancel the frozen picture and resume normal FAVORITE CHANNEL viewing.
OFF	Press to cancel the current operation and return to normal TV viewing
Using the White Labeled Buttons for Center Picture Operations.	
TV/VIDEO	Press to cycle the center picture through the video inputs. The surrounding channels will not change
ANT	Press to replace the center picture with a channel received through the AUX input. Press again to return to CATV input.
CH ⊕ ⊖ or **0**-**9** and ENTER or **JUMP**	Press to select the channel for the center picture. (see "Watching the TV" on pages 16-17)

Customizing the Menu

You have the option of creating a custom menu including up to seven of the menu functions that you use most. You can select any menu items except those found in the SET UP menu. Once you define a custom menu, it will appear first whenever you press the MENU button.

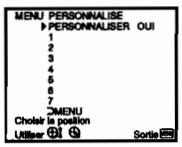
Creating or changing a CUSTOMIZED MENU

1 Select CUSTOMIZED MENU from the SET UP menu.

The CUSTOMIZED MENU will appear

2 Select CUSTOMIZE and press ⊕.

Press up or down on the joystick to display ON and press ⊕ again



3 Press down on the joystick to select 1 and press ⊕.

The menu for selection will appear

4 Locate the item you wish to include and press ⊕.

Grayed out items cannot be included in the CUSTOMIZED MENU.

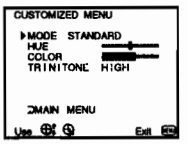
The CUSTOMIZED MENU will return with your choice in position 1.

5 Repeat steps 3 and 4 to assign items to any or all of the remaining positions (2 – 7)

Items which you have already included will appear in green on the menu for selection.

Press MENU when you are done.

Your CUSTOMIZED MENU will now operate the same as any of the standard menus.



To Access the MAIN MENU from your CUSTOMIZED MENU

Select ⊃MAIN MENU in the CUSTOMIZED MENU and press ⊕

To reset the CUSTOMIZED MENU choices

When the cursor points to CUSTOMIZE or position 1 to 7 in step 4 of "Creating or changing a CUSTOMIZED MENU", press RESET. All choices will be reset.

To cancel the CUSTOMIZED MENU function

1 Select ⊃MAIN MENU in the CUSTOMIZED MENU window and press ⊕

2 Select the CUSTOMIZED MENU from the SET UP menu.

3 Select CUSTOMIZE and set it to OFF.

Operating Video Equipment

Setting the Manufacturer's Code

You can use the supplied remote control to operate Sony or non-Sony video equipment that has an infrared sensor

1 Set the VTR 1/2/3/DVD/MDP switch to the position through which you would like to access the video equipment.

The following Sony equipment is preset to each position of the switch:

VTR1 (303) Beta, ED Beta VCRs
VTR2 (302) 8 mm VCR
VTR3 (301) VHS VCR
DVD/MDP (751) DVD Player

2 Press CODE SET, VTR/DVD (FUNCTION), the 0-9 buttons to enter the manufacturer's code number (see the following chart), then press ENTER.

For example, to operate a Sony 8mm VCR

If the remote control doesn't work

- Try repeating the set up procedures using the other codes listed for your equipment.

VCR manufacturer code numbers

Manufacturer	Code
Sony	301, 302, 303
Aiwa	338, 344
Admiral (M. Ward)	327
Audio Dynamic	314, 337
Bell & Howell (M. Ward)	330, 343
Broksonic	319, 317
Canon	309, 308
Citizen	332
Craig	315, 302, 332
Criterion	315
Curtis Mathis	304, 338, 309
Daewoo	341, 312, 309
DBX	314, 336, 337
Dimensia	304
Emerson	319, 320, 316, 317, 318,341
Fisher	330, 334, 335, 333
Funai	338
General Electric	329, 304, 309
Go Video	322
Goldstar	332
Hitachi	306, 304, 305,338
Instant Replay	309, 308
JC Penney	309, 305, 304, 330, 314, 336, 337
JVC	314, 336, 337
Kenwood	314, 336, 332, 337
LXI (Sears)	332, 305, 333, 334, 330, 335, 338
Magnavox	308, 309, 310
Marantz	314, 336, 337
Marta	332
Memorex	309, 335
Minolta	305, 304
Mitsubishi/MGA	323, 324, 325, 326
Multitech	325, 338, 321
NEC	314, 336, 337
Olympic	309, 308
Optimus	327
Panasonic	308, 309, 306, 307
Pentax	305, 304
Philco	308, 309
Philips	308, 309, 310
Pioneer	308
Quasar	308, 309, 306
RCA/PROSCAN	304, 305, 308, 309, 311, 329, 312, 313, 310
Realistic	309, 330, 328, 335, 324, 338
Sansui	314
Singer	315
Samsung	322, 313, 321
Sanyo	330, 335
Scott	312, 313, 321, 335, 323, 324,325, 326
Sharp	327, 328
Shintom	315
Signature 2000 (M Ward)	338, 327
Sylvania	308, 309, 338, 310
Symphonic	338
SV2000	338
Tashiro	332
Tatung	314, 336, 337
Teac	314, 336, 338, 337
Technics	309, 308
Toshiba	312, 311
Wards	327, 328, 335, 331, 332
XR-1000	315

Yamaha	330, 314, 336, 337
Zenith	331

MDP manufacturer code numbers

Manufacturer	Code
Sony	701
Panasonic	704, 710
Pioneer	702

DVD Player manufacturer code numbers

Manufacturer	Code
Sony	751

Tips

- In some rare cases, you may not be able to operate your non-Sony video equipment with the supplied remote control. In this case, please use the equipment's own remote control.
- When you remove the batteries, the code number may revert to the factory setting.

To operate video equipment

1 Set the VTR1/2/3/DVD/MDP switch to the position through which you would like to access the video equipment

2 Use the VCR/DVD/MDP buttons indicated in the following tables

Operating a VCR using the remote control	
To turn On/Off	Press VTR/DVD (POWER) [Green Button]
To select a channel	Press the 0 – 9 buttons
To change channels	Press CH +/–.
To record	Press ⏺ (REC) while pressing ▭ (upper left).
To play	Press ▶.
To stop	Press ■
To fast forward	Press ▶▶.
To rewind the tape	Press ◀◀.
To pause	Press ❚❚. Press again to resume normal playback.
To search the picture forward or backward	Press ▶▶ or ◀◀ during playback. Release to resume normal playback.
To change input mode	Press TV/VTR

Operating an MDP using the remote control	
To turn On/Off	Press VTR/DVD (POWER). [Green Button]
To play	Press ▶.
To stop	Press ■.
To pause	Press ❚❚. Press again to resume normal playback
To search the picture forward or backward	Press ▶▶ or ◀◀ during playback. Release to resume normal playback.
To search a chapter forward or backward	Press CH +/–.

Operating a DVD Player using the remote control	
To turn On/Off	Press VTR/DVD (POWER). [Green Button]
To play	Press ▶.
To stop	Press ■.
To pause	Press ❚❚. Press again to resume normal playback.
To step through different tracks of an audio disc	Press ▶▶ to step forward or ◀◀ to step backward.
To step through different chapters of a video disc	Press CH+ to step forward or CH– to step backward
To display the Title menu	Press TITLE
To display the DVD menu	Press DVD MENU.
To select tracks directly	Press 0-9 buttons.
To display the menu (Set up)	Press MENU

3 3

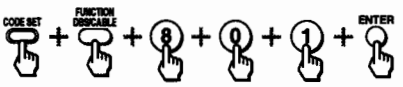
Operating a Cable Box or DBS Receiver

Setting the Manufacturer's Code

You can program the supplied remote control to operate a cable box or DBS receiver.

Press CODE SET, DBS/CABLE (FUNCTION), the 0-9 buttons to enter the manufacturer's code number (see the following chart), then press ENTER.

For example, to operate a Sony DBS receiver:



Manufacturer code numbers (cable box)

Manufacturer	Code
Hamlin/Regal	222, 223, 224, 225, 226
Jerrold/G. I.	201, 202, 203, 204, 205, 206, 207, 208, 218
Oak	227, 228, 229
Panasonic	219, 220, 221
Pioneer	214, 215
Scientific Atlanta	209, 210, 211
Tocom	216, 217
Zenith	212, 213

3 4

Manufacturer code numbers (DBS receiver)

Manufacturer	Code number
Sony	801 (preset code for remote control)
General Electric	802
RCA/PROSCAN	802

To operate the TV

Press TV (FUNCTION). Then use the TV control buttons to control the TV

For more details on operating the cable box or DBS receiver

Refer to the operating instructions that come with the equipment

If the remote control doesn't work

- First, try repeating the set up procedures using the other codes listed for your equipment.

Tips

- If more than one code number is listed, try entering them one by one until you come to the correct code for your equipment
- If you enter a new code number, the code number you previously entered at that setting is erased
- In some rare cases, you may not be able to operate your equipment with the supplied remote control In this case, use the equipment's own remote control unit
- Whenever you remove the batteries—to replace them, for example—if too much time is taken, the code numbers may revert to the factory setting and must be reset.

Troubleshooting

No picture (screen not lit), no sound

- Make sure the power cord is plugged in
- Operate with the buttons on the TV and the remote control.
- Check to see if the TV/VIDEO setting is correct: when watching TV, set to TV, and when watching video tapes, set to VIDEO 1, 2, 3 or 4.
- Try another channel. It could be station trouble.
- Perform AUTO SET UP again using the SET UP button to return to the factory preset condition. (see "To perform AUTO SET UP again" on page 15)

Remote control does not operate

- Batteries could be weak. Replace the batteries.
- Press TV (FUNCTION) when operating your TV.
- Make sure the TV's power cord is connected securely to the wall outlet
- Locate the TV at least 3-4 feet away from fluorescent lights.
- Check the S-Link connection. (see "Using the S-Link function" on page 11)
- Check the polarity of the batteries.

Dark, poor or no picture (screen lit), good sound

- Adjust PICTURE in the VIDEO menu (see "PICTURE" on page 23)
- Adjust BRIGHTNESS in the VIDEO menu (see "BRIGHTNESS" on page 23)
- Check antenna/cable connections.
- Perform AUTO SET UP again using the SET UP button to return to the factory preset condition (see "To perform AUTO SET UP again" on page 15)
- When VIDEO LABEL is set to WEB, the screen will darken, creating an ideal picture for WebTV viewing. (see "VIDEO LABEL" on page 28)

Good picture, no sound

- Press MUTING so that "MUTING" disappears from the screen. (see "MUTING" on page 16)
- Check the MTS setting in the AUDIO menu (see "MTS" on page 24)
- Make sure SPEAKER is set to ON in the AUDIO menu. (see "SPEAKER" on page 24)
- Perform AUTO SET UP again using the SET UP button to return to the factory preset condition (see "To perform AUTO SET UP again" on page 15)

Cannot receive upper channels (UHF) when using an antenna

- Make sure CABLE is OFF in the SET UP menu. (see "CHANNEL SET UP" on page 26)
- Use AUTO PROGRAM to add receivable channels that are not presently in TV memory (see "CHANNEL SET UP" on page 26)

No color

- Adjust the COLOR in the VIDEO menu. (see "COLOR" on page 23)
- Black and white programs cannot be seen in color
- Perform AUTO SET UP again using the SET UP button to return to the factory preset condition. (see "To perform AUTO SET UP again" on page 15)

Only snow and noise appear on the screen

- Check the CABLE setting in the SET UP menu (see "CHANNEL SET UP" on page 26)
- Check the antenna/cable connections
- Make sure the channel is broadcasting programs
- Press ANT to change the input mode. (see "ANT" on page 17)

Dotted lines or stripes

- Adjust the antenna
- Move the TV away from noise sources such as cars, neon signs, or hair-dryers

TV is fixed to one channel

- Try turning CHANNEL FIX off. (see "CHANNEL SET UP" on page 26)
- Use AUTO PROGRAM to add receivable channels that are not presently in the TV memory. (see "CHANNEL SET UP" on page 26)

Double images or ghosts

- Use a highly directional outdoor antenna or a cable (when the problem is caused by reflections from nearby mountains or tall buildings)

Cannot operate menu

- If the item you want to choose appears in gray, you cannot select it. Press TV/VIDEO correctly

The electronic console doors do not operate properly (KV-35XBR88 only)

- Make sure the AUTO ACCESS switch is set to ON
- Remove any dirt or dust from the ultrasonic sensor
- The clothes you are wearing may be absorbing the ultrasonic waves emitted by the sensor Try passing a different type of surface before the sensor.

Cannot receive any channels when using cable TV

- Make sure CABLE is ON in the SET UP menu (see "CHANNEL SET UP" on page 26)
- Use AUTO PROGRAM to add receivable channels that are not presently in TV memory. (see "CHANNEL SET UP" on page 26)

Cannot gain enough volume when using a cable box

- Increase the volume at the cable box. Then press TV (FUNCTION) and adjust the TV's volume.

TV malfunctions when using the S-Link function

- Make sure the TV's power cord is connected securely to the wall outlet.
- Check the S-Link connection (see "Using the S-Link function" on page 11)

CHANNEL INDEX does not display all available channels

- Make sure CABLE is ON in the SET UP menu. (see "CHANNEL SET UP" on page 26)
- Use AUTO PROGRAM to add receivable channels that are not presently in the TV memory. (see "CHANNEL SET UP" on page 26)

FAVORITE CHANNEL does not display your choices

- Verify that MODE is set to MANUAL in the FAVORITE CHANNEL menu. (see "Setting FAVORITE CHANNEL manually" on page 28)

The CUSTOMIZED MENU does not appear when you press MENU

- Verify CUSTOMIZE is set to ON in the CUSTOMIZED MENU window (see "Creating or changing a CUSTOMIZED MENU" on page 31)
- If no items are selected in the CUSTOMIZED MENU, CUSTOMIZE is set to OFF automatically. (see "Creating and changing a CUSTOMIZED MENU" on page 31)

Some video sources do not appear when you press TV/VIDEO

- Ensure that VIDEO LABEL is not set to SKIP. (see "VIDEO LABEL" on page 27)

Recording through MONITOR OUT does not function properly when recording in PIP or P&P mode

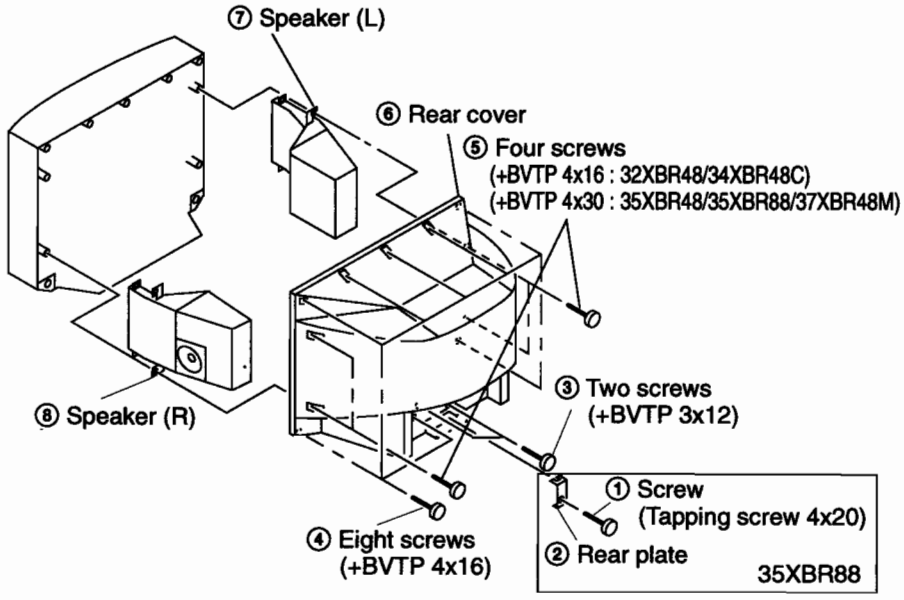
- MONITOR OUT will not record both images in PIP or P&P Only the main picture will be recorded.
- If you are recording the main picture and you switch to the sound of the sub picture using the AUDIO button, the main picture will be recorded with sound from the other program

To reset the TV to factory settings

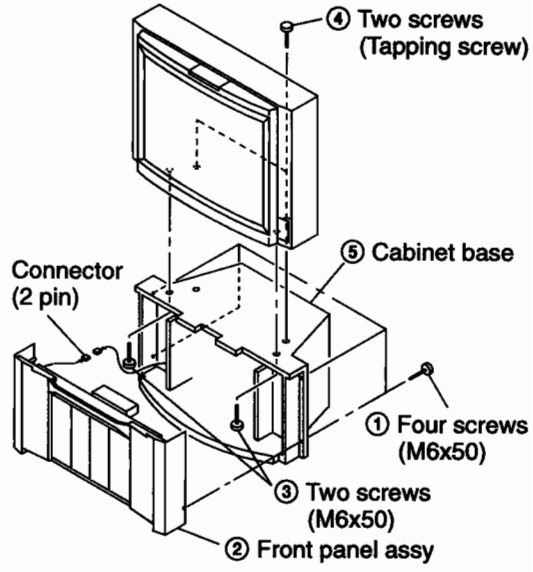
- First, turn the TV on Then, while pressing the RESET button on the remote control, press the POWER button on the TV The TV will turn itself off, then back on When the TV turns on again, all settings will be reset, and the EASY SETUP GUIDE will appear.

SECTION 2
DISASSEMBLY

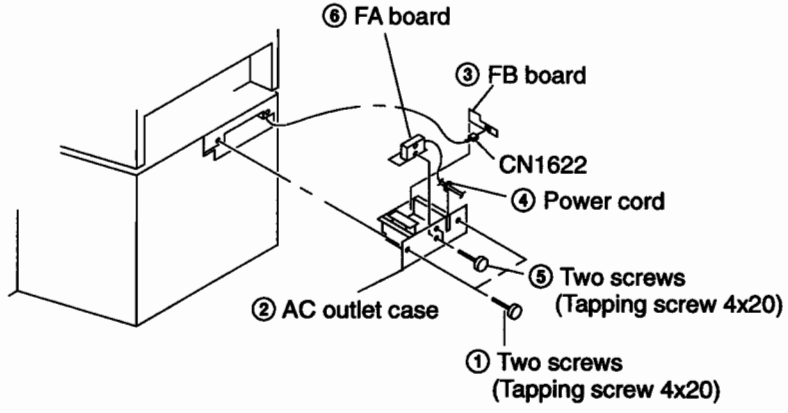
2-1. REAR COVER AND SPEAKER REMOVAL



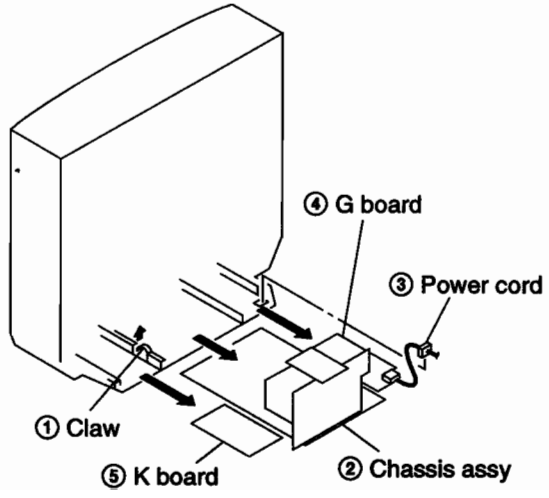
2-2-1. CABINET BASE REMOVAL (KV-35XBR88)



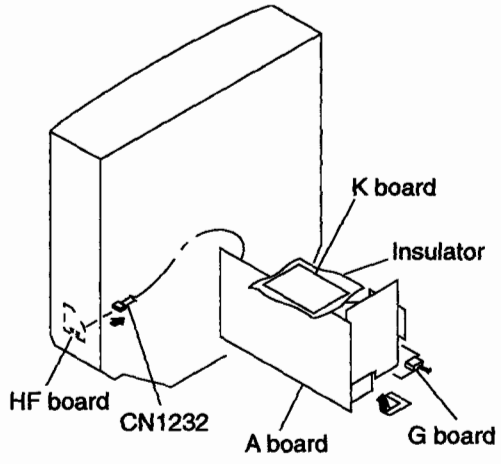
2-2-2. FA AND FB BOARDS REMOVAL (KV-35XBR88)



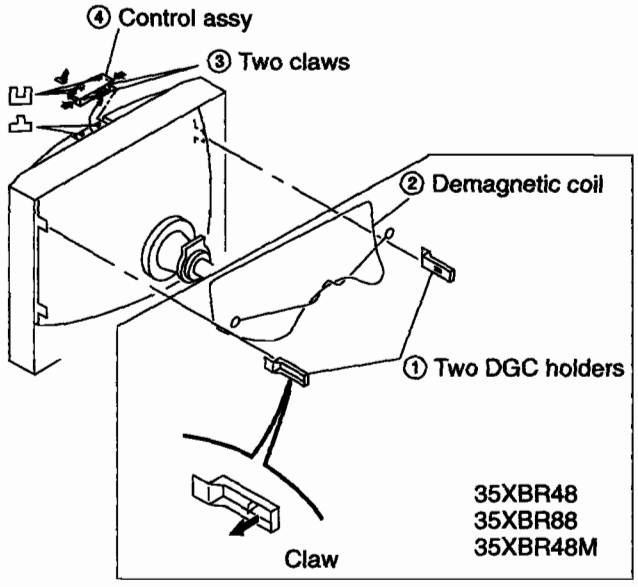
2-3. CHASSIS ASSY REMOVAL



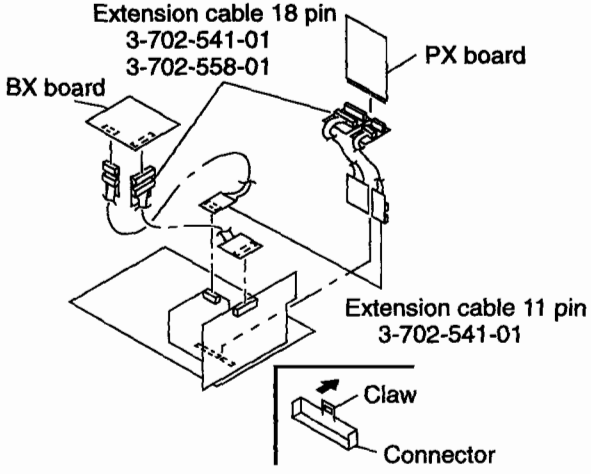
2-4. SERVICE POSITION



2-5. CONTROL ASSY REMOVAL



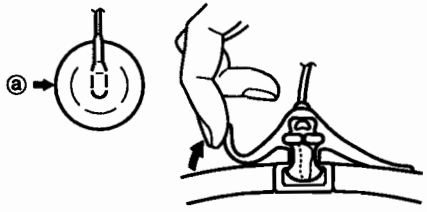
2-6. EXTENSION CABLE



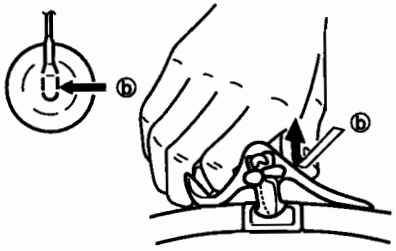
• REMOVAL OF ANODE-CAP

NOTE : Short circuit the anode of the picture tube and the anode cap to the metal chassis. CRT chield or carbon painted on the CRT, after removing the anode.

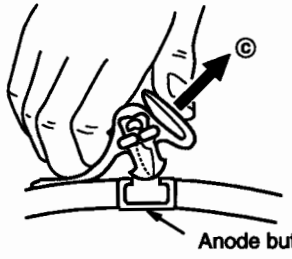
•REMOVING PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.



② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.



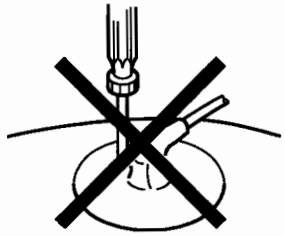
③ When one side of the rubber cap is separated from the anode button, the anode-cap can be romoved by turning up the rubber cap and pulling up it in the direction of the arrow ⓒ.

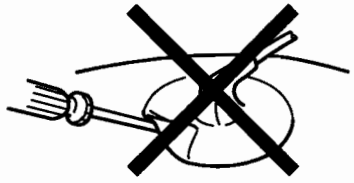
•HOW TO HANDLE AN ANODE-CAP

① Don't hurt the surface of anode-caps with sharp shaped material!

② Don't press the rubber hardly not to hurt inside of anode-caps! A material fitting called as shatter-hook terminal is built in the rubber.

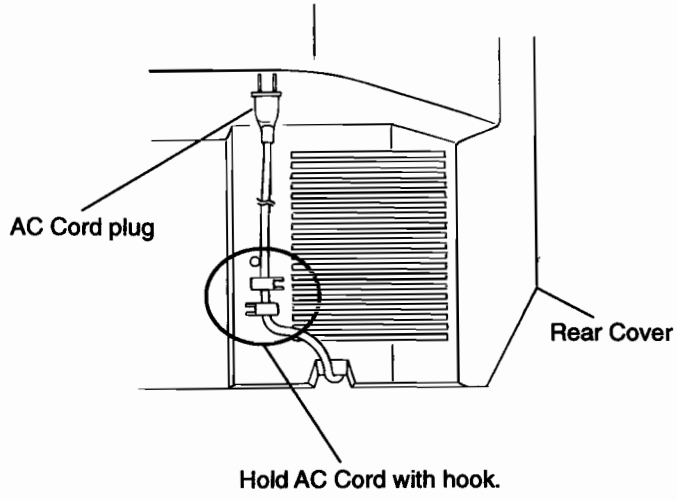
③ Don't turn the foot of rubber over hardly! The shatter-hook terminal will stick out or hurt the rubber.





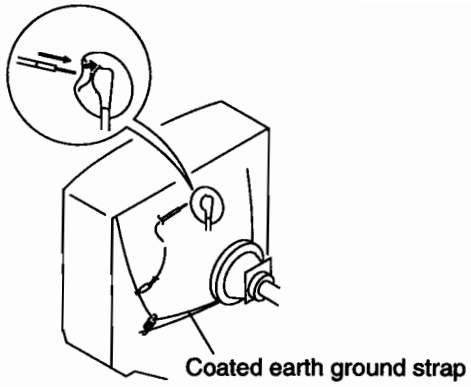
CAUTION

Be sure to attach AC Cord to Rear Cover with the hook in the following way for after service.
Then check if the AC cord is proteced against being pressed under the set.

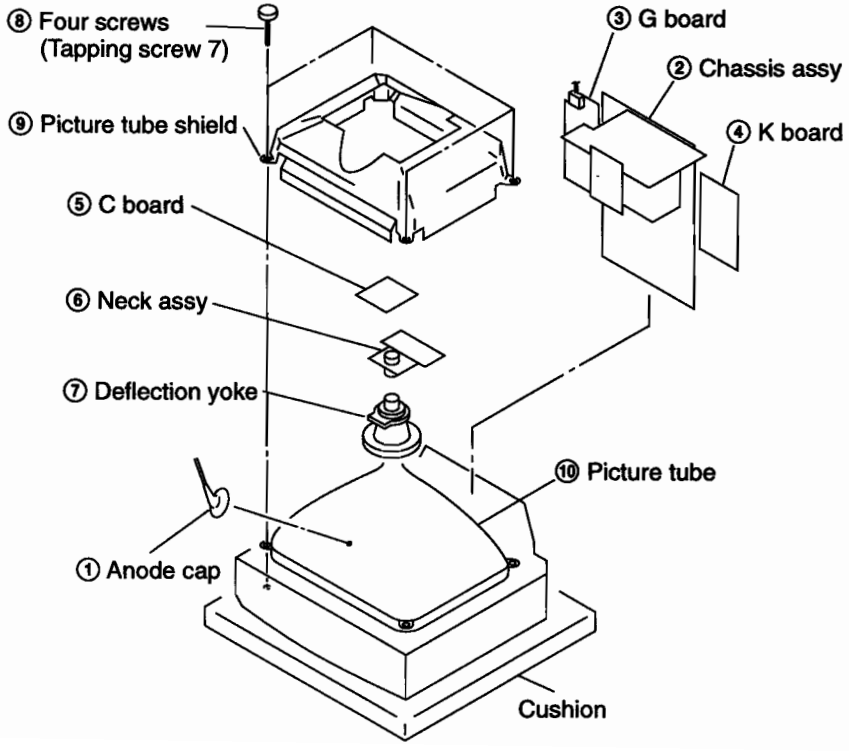


2-7. PICTURE TUBE REMOVAL

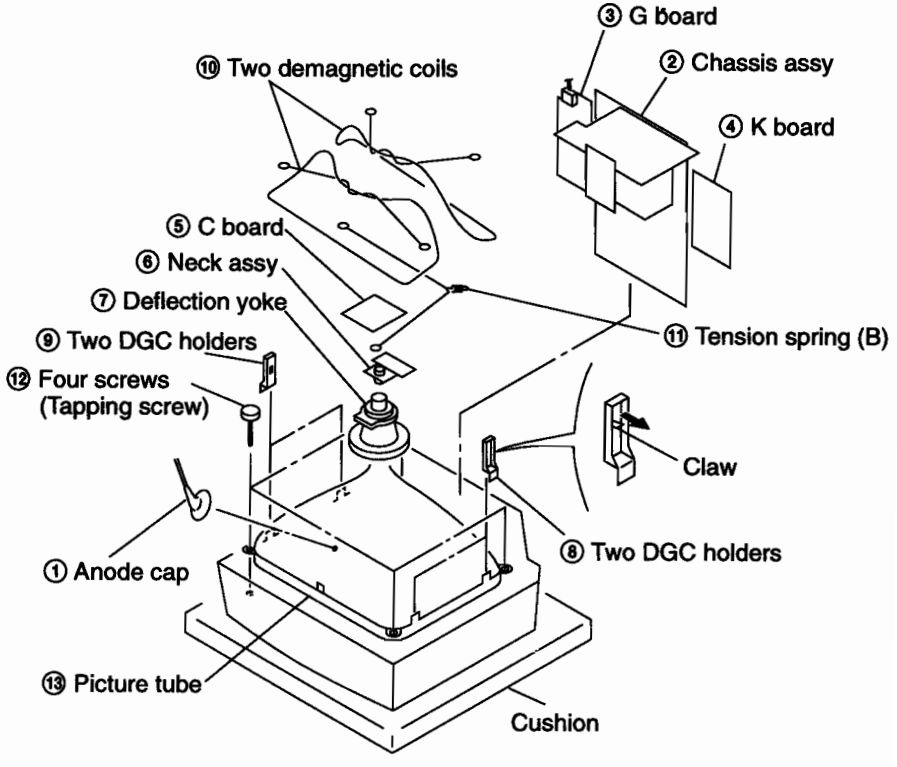
WARNING
Before removing anode cap H.V remains in the CRT even after the power is disconnected. To avoid electrical shock, before attempting to remove the anode cap, discharge CRT : short between anode and CRT coated earth ground strap.



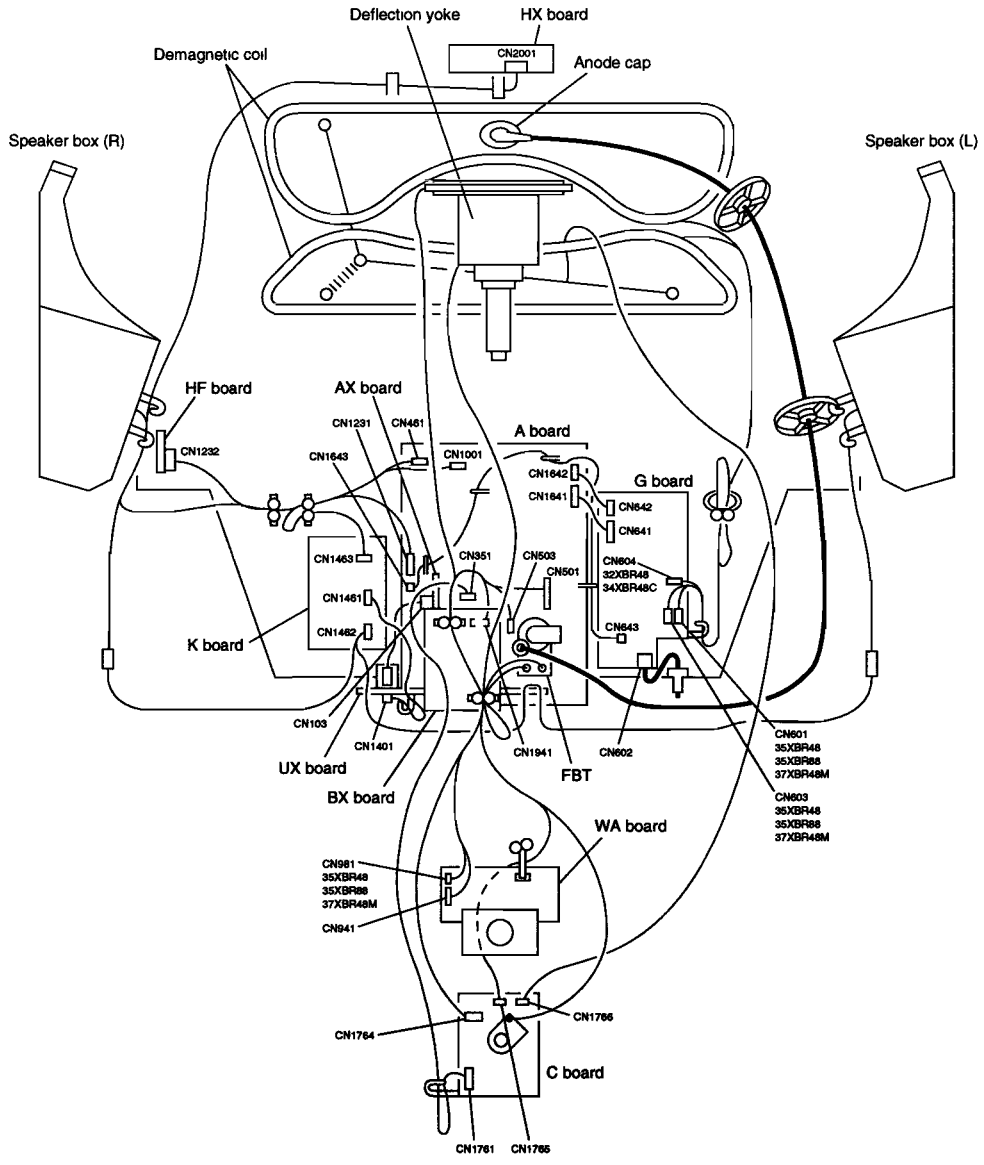
(1) KV-32XBR48/34XBR48C



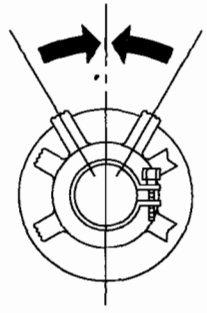
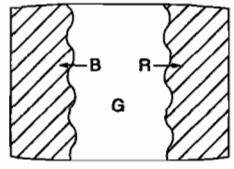
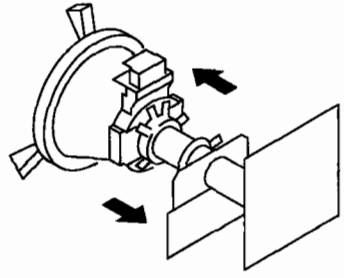
(2) KV-35XBR48/35XBR88/37XBR48M

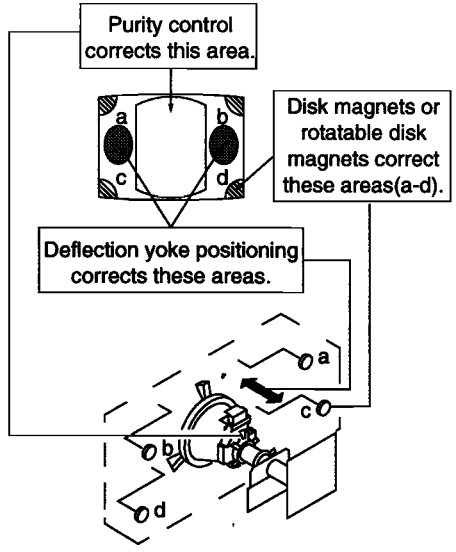


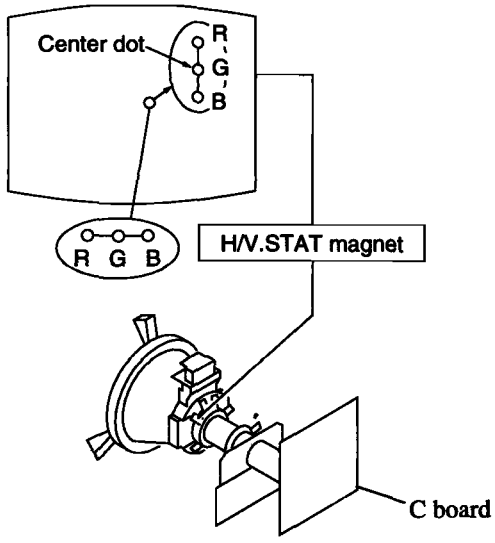
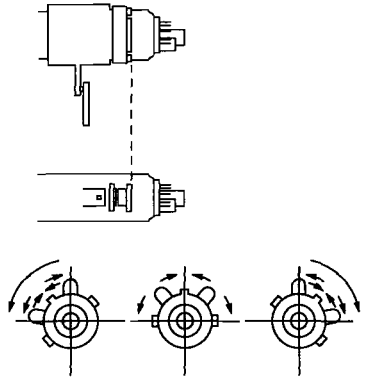
2-8. WIRE DRESSING

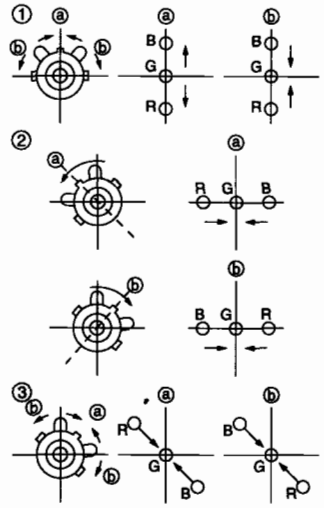
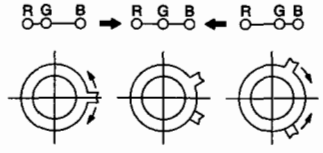
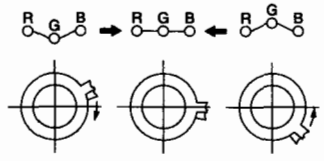
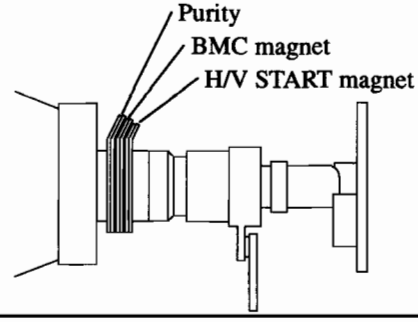


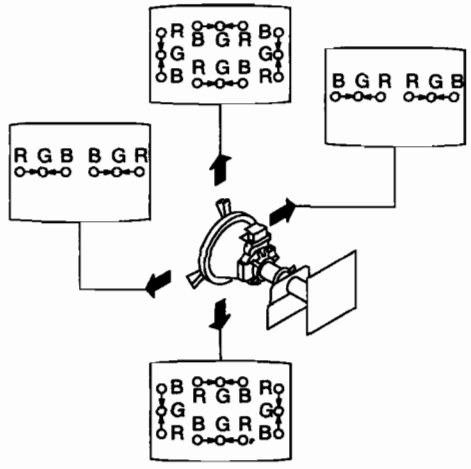
SECTION 3
SET-UP ADJUSTMENTS

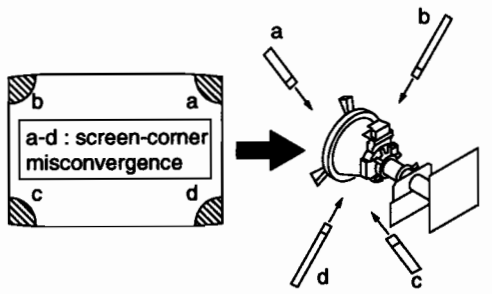
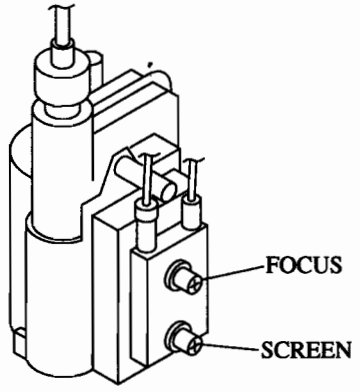
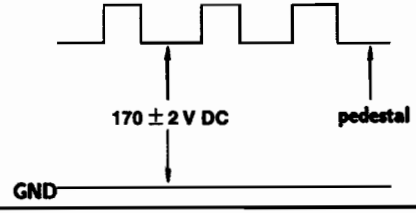
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
● The following adjustments should be made when a complete realignment is required or a new picture tube is installed. ● These adjustments should be performed with rated power supply voltage unless otherwise noted. The controls and switch should be set as follows unless otherwise noted : VIDEO MODE : STANDARD PICTURE control..... normal BRIGHTNESS control..... normal **Preparation:** ● Feed in the white pattern signal. (1) In order to reduce the influence of geomagnetism on the set's picture tube face it east or west. Note:Please do not use the hand degausser, because the hand degausser efects a spot on a CRT and magnetizes CRT around.	Color bar Pattern Generator			Purity control 
BEAM LANDING 1. Input a *raster signal with the pattern generator. 2. Loosen the deflection yoke mounting screw, and set the *purity control to the center. 3. Turn the *raster signal of the pattern generator to green. 4. Move the *deflection yoke backward, and adjust with the purity control so that green is in the center and red and blue are at the sides evenly. 5. Move the deflection yoke forward, and adjust so that the entire screen becomes green.	*White Pattern *Green Pattern		*Purity Control *Deflection Yoke	 

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
6. Switch over the raster signal to red and blue and confirm the condition. 7. When the position of the deflection yoke is determined, tighten it with the deflection yoke mounting screw. 8. When landing at the corner is not right, adjust by using the *disk magnets.			*Disk Magnets	

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
CONVERGENCE **Preparation:** ● Before starting, perform FOCUS, V. LIN and V. SIZE adjustments. ● Set BRIGHTNESS control to minimum. ● Feed in *signal. **(1) Horizontal and Vertical Static Convergence Adjustment** 1. Adjust *magnet to convergence red, green and blue dots in the center of the screen. (Vertical movement)	*Dot Pattern		*H/V. STAT Magnet	
●Tilt the *magnet and adjust static convergence to open or close the *magnet.			*V. STAT Magnet	-Neck assy Position- 

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
2. When the *magnet is moved in the direction of arrow ⓐ and ⓑ, red, green and blue dots move as shown below.			*V. STAT Magnet	
● Operation of *Magnet			*BMC Magnet	
● The respective dot positions resulting from moving each magnet interact, so be sure to perform adjustment while tracking. Use the V STAT tabs to adjust the red, green, and blue dots so they coincide at the center of screen (by moving the dots in the horizontal direction).				
● Y separation axis correction magnet adjustment 1. Receive a *signal, and adjust *PICTURE and BRIGHTNESS. 2. Adjust the deflection yoke to the upright condition when it hits the CRT. 3. Adjust so that the Y separation Axis correction magnet on the neck assembly is symmetrical at the top and bottom (open state). 4. Return the deflection yoke to its original position.	*Cross-hatch Pattern		*PICTURE ..... minimum BRIGHTNESS ..... normal	

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
(2) Dynamic Convergence Adjustment **Preparation:** ● Before starting perform Horizontal and Vertical static convergence Adjustment. 1. Slightly loosen deflection yoke screw. 2. Remove deflection yoke spacers. 3. Move the *deflection yoke for best convergence as shown below. 4. Tighten the deflection yoke screw. 5. Install the deflection yoke spacers.			*Deflection Yoke	

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
(3) Screen-corner Convergence Adjustment a–b : screen-corner misconvergence Affix a Permalloy ass'y corresponding to the misconverged areas			*SCREEN control (On FBT Ass'y) Permalloy Ass'y	 Permalloy assembly
FOCUS Adjust *FOCUS control for best picture.			*FOCUS control (On FBT Ass'y)	 FBT
SCREEN (G2) 1. Input a *signal. 2. Adjust *PICTURE, BRIGHTNESS controls. 3. Adjust S BRT, G CUT, B CUT in service mode so that voltages on the red, green and blue *cathodes are *Voltage with an oscilloscope. 4. Observe the screen and adjust *SCREEN (G2)VR On FBT (Flyback transformer ass'y) to obtain the faintly visible background of dot signal.	*Dot pattern Oscilloscope	*cathodes	*PICTURE ..... normal *BRIGHTNESS ..... normal *S BRT *G CUT *B CUT *SCREEN (G2) (On FBT Assy)	*170 ± 2 V DC 

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER

WHITE BALANCE ADJUSTMENTS

	Disp.	Item	Ave. Data	
			32"/34"	35"/37"
VP	GDRV	Green Drive	38	37
	BDRV	Blue Drive	36	33
	GCUT	Green Cut-off	12	11
	BCUT	Blue Cut-off	10	9
	SBRT	Sub Bright	28	24

1. Input a *signal.
2. Set to service adjustment mode.
3. Set the PICTURE and BRIGHTNESS to *adjustment.
4. Adjust with *S BRT if necessary.
5. Select *G CUT and *B CUT with [1] and [4] .
6. Adjust with [3] and [6] for the best white balance.
7. Set the *PICTURE and BRIGHTNESS to *adjustment.
8. Select *G AMP and B AMP with [1] and [4] .
9. Adjust with [3] and [6] for the best white balance.
10. Write into the memory by pressing [MUTING] then [ENTER] .

*Entire White Pattern

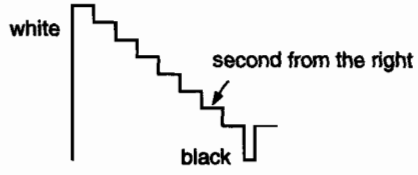
*PICTURE ..... minimum
BRIGHTNESS ..... minimum
*S BRT
*G CUT
*B CUT
*PICTURE ..... maximum
BRIGHTNESS ..... maximum
*G AMP
B AMP

SUB BRIGHT ADJUSTMENT

1. Set to service adjustment mode.
2. Input a *signal.
3. Select SBRT with [1] and [4] , and adjust SUB BRIGHT level with [3] and [6] so that the stripe second from the right is dimly lit.
4. Write into the memory by pressing [MUTING] then [ENTER] .

*Grey scale pattern

*PICTURE ..... minimum
BRIGHTNESS ..... normal
SBRT



ELECTRICAL ADJUSTMENTS BY REMOTE COMMANDER

Use of Remote Commander (RM-Y144) can be performed circuit adjustments about this model.

NOTE : Test Equipment Required.

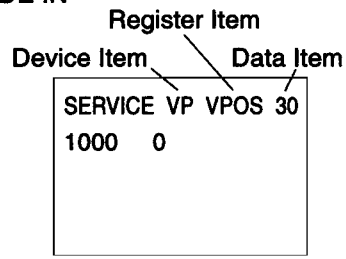
1. Pattern Generator
2. Frequency counter
3. Digital multimeter
4. Audio OSC

1. METHOD OF SETTING THE SERVICE ADJUSTMENT MODE

SERVICE MODE PROCEDURE

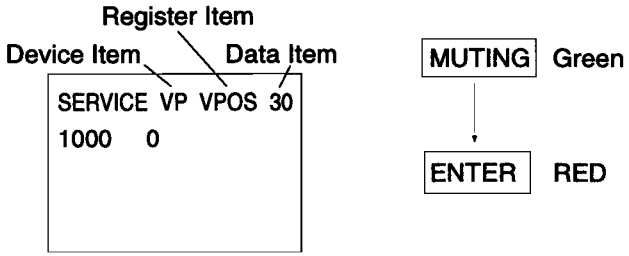
1. Standby mode. (Power off)
2. [DISPLAY] → [5] → [VOL (+)] → [POWER] on the Remote Commander. (Press each button within a second.)

SERVICE ADJUSTMENT MODE IN

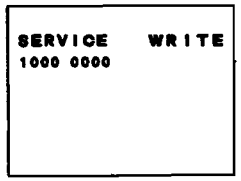


3. The CRT displays the item Being adjusted.
4. Press [2] or [5] on the Remote Commander to select the device item.
5. Press [1] or [4] on the Remote Commander to select the item.
6. Press [3] or [6] on the Remote Commander to change the data.
7. If you want to recover the latest values press [0] then [ENTER] to lead the memory.
8. Press [MUTING] then [ENTER] to write into memory.

SERVICE ADJUSTMENT MODE MEMORY



8. Press [8] then [ENTER] on the Remote Commander to reset.



Carry out step 8) when adjusting IDs 0 to 4 and when replacing and adjusting IC102.

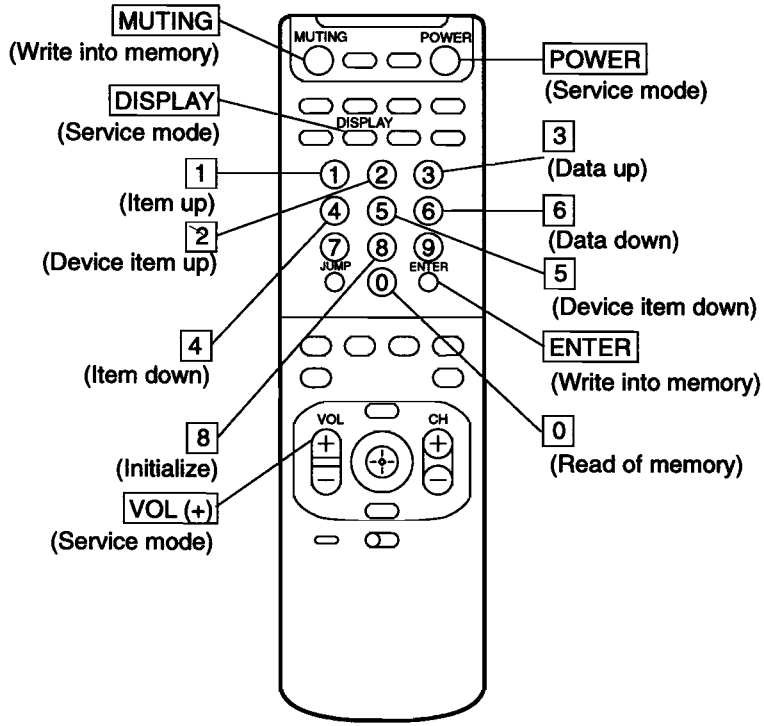
Factory original setting

9. Turn set off and on to exit.

2. MEMORY WRITE CONFIRMATION METHOD

1. After adjustment, pull out the plug from AC outlet, and next place, plug in AC outlet again.
2. Turn the power switch ON and set to Service Mode.
3. Call the adjusted items again, confirm they were adjusted.

3. ADJUST BUTTONS AND INDICATOR



SERVICE DATA

	Discriptions	Device	Resistor Name	Data Length	Initial Data	Avarage Data		Comment
						32"/34"	35"/37"	
VP	VPOS	CXA2025S	V-Position	0-63	20	23	12	Adjust
	VSIZ		V-Size	0-63	20	34	37	Adjust
	VCOM		V-Compensation	0-3	1	1	1	Adjust
	VLIN		V-Linearity	0-15	7	8	7	Adjust
	VSCO		S-Correcttion	0-15	7	7	7	Adjust
	HPOS		H-Position	0-15	7	10	12	Adjust
	HSIZ		H-Size	0-63	20	36	36	Adjust
	PAMP		PIN-Compensation	0-63	31	28	27	Adjust
	UPIN		Upper-CornerPin	0-15	7	7	7	Adjust
	LPIN		Lower-CornerPin	0-15	7	7	7	Adjust
	PPHA		Pin-Phase	0-15	7	5	5	Adjust
	AFC		AFC	0-3	2	2	2	Adjust
	VBOW		AFC-Bow	0-15	7	5	6	Adjust
	VANG		AFC-Angle	0-15	7	8	7	Adjust
	REF		Reference-Position	0-3	2	1	2	Adjust
	GDRV		Green-Drive	0-63	31	38	37	Adjust
	BDRV		Blue-Drive	0-63	31	36	33	Adjust
	GCUT		Green-Cutoff	0-15	7	12	11	Adjust
	BCUT		Blue-Cutoff	0-15	7	10	9	Adjust
	SCON		Sub-Contrast	0-15	7	9	10	Adjust
	SHUE		Sub-Hue	0-15	7	4	2	Adjust
	SCOL		Sub-Color	0-15	7	6	6	Adjust
	SBRT		Sub-Brightness	0-63	31	28	24	Adjust
	SSHP		Sub-Sharpness	0-15	7	7	7	Adjust
	CDM2		Countdown Mode 2	0-1	1	1	0	Adjust
	DPIX		Dynamic-Picture	0, 1	1	1	1	Adjust
	Y-DC		DC-Transmission	0, 1	1	1	1	Adjust
	ABLM		ABL	0, 1	1	1	1	Adjust
	NOTC		Chroma Trap	0, 1	0	0	0	Adjust
	CROM		Chroma Trap-Adjust	0-15	7	7	7	Adjust
	TOT		TOT-Filter	0, 1	1	1	1	Adjust
	PREL		Pre/Over-Shoot	0-3	3	0	0	Adjust
	SHPF		Sharpness-f0	0-3	2	2	2	Adjust
	RON		Red-Off	0, 1	1	1	1	Adjust
	GON		Green-Off	0, 1	1	1	1	Adjust
	BON		Blue-Off	0 , 1	1	1	1	Adjust
	CDMD		V-Countdown	0, 1	0	0	0	Adjust
	HBSW		H Blanking Switch	0, 1	1	0	0	Adjust
	LBLK		Left Blanking	0-15	2	7	7	Adjust
	RBLK		Right Blanking	0-15	7	7	7	Adjust
AP	SVOL	BH3856FS	Sub-Volume	0-15	0	0	0	Adjust
	SBAL		Sub-Balance	0-15	7	7	7	Adjust

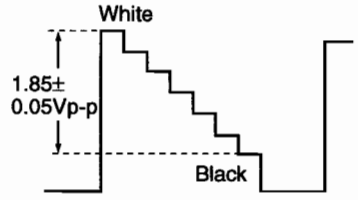
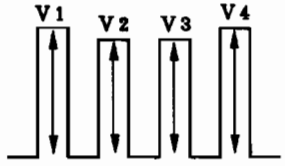
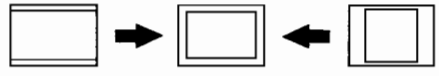
	Discriptions	Device	Resistor Name	Data Length	Initial Data	Avarage Data		Comment
						32"/34"	35"/37"	
	SBAS		Sub-Bass	0-15	7	4	7	Adjust
	STRE		Sub-Treble	0-15	7	9	7	Adjust
3D	CGAN	µPD6488	CGAIN	0, 1	1	1	1	Adjust
	AVAP		AVAPON	0, 1	1	1	1	Adjust
	MS		MS0/MS1	0-2	0	0	0	Adjust
	YDLL		YDELAY-L	0-7	2	2	2	Adjust
	HRD8		HRD08	0, 1	0	0	0	Adjust
	HRD7		HRD00-07	0-255	12	12	12	Adjust
	DYCO		DYCOR	0-15	5	5	5	Adjust
	DYGA		DYGAIN	0-15	8	8	8	Adjust
	DCCO		DCCO	0-15	3	3	3	Adjust
	DCCG		DCGAIN	0-15	7	7	7	Adjust
	VTR0		VTR0/VTR1	0-2	0	0	0	Adjust
	VTRH		VTRH	0-2	2	2	2	Adjust
	VTRR		VTRR	0-15	7	7	7	Adjust
	SELJ		SELJ	0, 1	1	1	1	Adjust
	HSDR		HSDR	0-15	7	7	7	Adjust
	WSCO		WSCOR	0-15	15	15	15	Adjust
	LSDR		LDSREF	0-15	7	7	7	Adjust
	WSD1		WSDR1	0-15	15	15	15	Adjust
	WSD2		WSDR2	0-15	15	15	15	Adjust
	VAPG		VAPGAIN	0-7	4	4	4	Adjust
	VAPI		VAPINV	0-31	15	15	15	Adjust
	MOTE		MDTES	0, 1	0	0	0	Adjust
	YTM8		YTM87	0, 1	0	0	0	Adjust
	DYTR		DYTRAP	0, 1	1	1	1	Adjust
	VHG		VHG	0-3	3	3	3	Adjust
	YH87		YH87	0, 1	0	0	0	Adjust
	YSG		YSG	0, 1	1	1	1	Adjust
	YTG		YTG	0-3	1	1	3	Adjust
	VTMR		VTMREF	0-15	12	12	12	Adjust
	VHRE		VHREF	0-15	11	11	11	Adjust
	YT1R		YT1REF	0-15	2	2	2	Adjust
	CT2Y		CT2YT	0, 1	0	0	0	Adjust
	CTG		CTG	0-3	1	1	1	Adjust
	CTMR		CTMREF	0-15	10	10	10	Adjust
	CT2R		CT2REF	0-15	10	10	10	Adjust
	CT1R		CT1REF	0-15	7	7	7	Adjust
PI	SHPR	TA1226N	Sharpness	0-127	59	59	59	Adjust
	SRTS		SRT Start Position	0, 1	3	3	3	Adjust
	GIRE		Gamma Start Point	0-3	3	3	3	Adjust
	GCUR		Gamma Curve	0, 1	0	0	0	Adjust
	RS		RS	0-7	0	0	0	Adjust
	RTC		RTC	0-7	4	4	4	Adjust

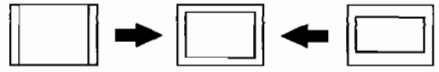
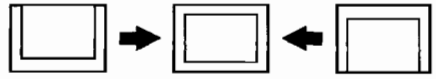
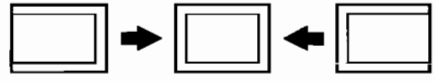
	Discriptions	Device	Resistor Name	Data Length	Initial Data	Avarage Data		Comment
						32″/34″	35″/37″	
PP	SMT6	SAB9076	SMART6	0, 1	1	1	1	Adjust
	SKIP6		SKIP6	0, 1	0	0	0	Adjust
	BGHP		BGhfp	0-15	9	7	6	Adjust
	BGVP		BGvfp	0-15	8	8	6	Adjust
	MAHP		MAhfp	0-15	7	6	5	Adjust
	MAVP		MAvfp	0-255	24	24	24	Adjust
	SAHP		SAhfp	0-15	3	3	3	Adjust
	SAVP		SAvfp	0-255	24	24	24	Adjust
	VPED		PedestV	0-15	0	14	0	Adjust
	UPED		PedestU	0-15	0	14	0	Adjust
	MDEC		16h , bit0-4	0-32	18	18	18	Adjust
	SDEC		15h , bit0-4	0-32	16	16	16	Adjust
	DISS		17h , bit0-7	0-126	2	2	2	Adjust
	BSIZ		---	0-255	34	34	34	Adjust
	POFH		---	0-15	11	11	11	Adjust
	POFV		---	0-15	6	6	6	Adjust
	DHPS		Display H Position Start	0-15	3	3	3	Adjust
	P&PV		SDhfp , MDhfp under P&P	0-255	62	62	62	Adjust
	BBR0		---	0-3	1	1	1	Adjust
	BCL0		---	0-7	7	7	7	Adjust
	BBR2		---	0-3	2	2	2	Adjust
	BCL2		---	0-7	6	6	6	Adjust
	BBR3		---	0-3	0	0	0	Adjust
	BCL3		---	0-7	7	7	7	Adjust
MC	MHUE	CXA2019	HUE	0-63	26	26	26	Adjust
	MCOL		COLOR	0-63	38	35	35	Adjust
	MSCO		SUB CONT	0-15	7	7	6	Adjust
	MSCL		SUB COLOR	0-15	7	7	5	Adjust
	MSHU		SUB HUE	0-15	7	7	9	Adjust
	MTOT		TOT ON	0, 1	1	1	1	Adjust
	MTRP		TRAP ON	0, 1	0	0	0	Adjust
	MTRA		CTRAPADJ	0-15	7	7	7	Adjust
	MCD2		CD MODE2	0, 1	1	1	1	Adjust
	MFSC		FSC OUT	0, 1	1	1	1	Adjust
	MYDR		Y DRIVE	0-31	24	22	22	Adjust
	MVPE		V PED	0-15	7	7	8	Adjust
	MUPE		U PED	0-15	7	7	6	Adjust
	MRVP		RV PED	0-15	7	7	7	Adjust
	MRUP		RU PED	0-15	7	7	7	Adjust
	MDCT		DC TRAN	0-7	0	0	0	Adjust
	MRYD		RY DRIVE	0-31	31	31	31	Adjust
	MPRE		PRE OVER	0-3	0	0	0	Adjust
	MRUD		RU DRIVE	0-31	15	15	15	Adjust

	Discriptions	Device	Resistor Name	Data Length	Initial Data	Avarage Data		Comment
						32"/34"	35"/37"	
	MRVD		RV DRIVE	0-31	15	15	15	Adjust
	MDLY		DELAY	0-3	0	0	0	Adjust
	MSCR		SCP BGR	0-3	1	1	1	Adjust
	MSCF		SCP BGF	0-3	1	1	1	Adjust
IC	ICYC	CXA2019	CV/YC	0, 1	1	1	1	Adjust
	IHUE		HUE	0-63	24	24	24	Adjust
	ICOL		COLOR	0-63	38	37	37	Adjust
	ISCO		SUB CONT	0-15	7	6	5	Adjust
	ISCL		SUB COLOR	0-15	7	7	4	Adjust
	ISHU		SUB HUE	0-15	7	7	9	Adjust
	ITOT		TOT ON	0, 1	1	1	1	Adjust
	ITRP		TRAP ON	0, 1	0	0	0	Adjust
	ITRA		CTRAPADJ	0-15	7	7	7	Adjust
	ICD2		CD MODE2	0, 1	1	1	1	Adjust
	IYDR		Y DRIVE	0-31	26	24	24	Adjust
	IVPE		V PED	0-15	7	7	7	Adjust
	IUPE		U PED	0-15	7	7	5	Adjust
	IRVP		RV PED	0-15	7	7	7	Adjust
	IRUP		RU PED	0-15	7	7	7	Adjust
	IDCT		DC TRAN	0-7	0	0	0	Adjust
	IRYD		RY DRIVE	0-31	31	31	31	Adjust
	IPRE		PRE OVER	0-3	0	0	0	Adjust
	IRUD		RU DRIVE	0-31	15	15	15	Adjust
	IRVD		RV DRIVE	0-31	15	15	15	Adjust
	IDLY		DELAY	0-3	0	0	0	Adjust
	ISCR		SCP BGR	0-3	1	1	1	Adjust
	ISCF		SCP BGF	0-3	1	1	1	Adjust
DA	RTCO	CXA1315	DAC0 (Rotation Coil)	0-63	32	32	32	Adjust
	2HUE		DAC1 (CXA2039 Hue)	0-63	32	(24)	32	Adjust
	2COL		DAC2 (CXA2039 COL)	0-63	32	(31)	32	Adjust
CC	CRIH	CXP85856A-001S		0-15	9	9	9	Fixed Value Only
	CRIL			0-15	2	2	2	Fixed Value Only
	CFLD			0-15	5	5	5	Fixed Value Only
	CCDI			0-7	3	3	3	Fixed Value Only
	CRIP			0-7	4	4	4	Fixed Value Only
	CRIT			0-3	1	1	2	Fixed Value Only
	CSB1			0-3	3	3	3	Fixed Value Only
	CSB2			0-7	4	4	4	Fixed Value Only
	CCBD			0-15	4	4	4	Fixed Value Only
	CCFD			0-63	7	7	7	Fixed Value Only
	CREP			0-256	142	142	142	Fixed Value Only
	CSEP			0-256	186	186	186	Fixed Value Only
	CRBD			0-15	8	8	8	Fixed Value Only

	Discriptions	Device	Resistor Name	Data Length	Initial Data	Avarage Data		Comment
						32″/34″	35″/37″	
	CRFD			0-15	9	9	9	Fixed Value Only
	CSSD			0-15	3	3	3	Fixed Value Only
	CSED			0-15	9	9	9	Fixed Value Only
	CSBS			0-31	12	12	12	Fixed Value Only
	CDSD			0-31	8	8	8	Fixed Value Only
	CCDS			0-31	9	9	9	Fixed Value Only
	CHMK			0-63	42	42	42	Fixed Value Only
	CHSY			0-255	136	136	136	Fixed Value Only
OP	DISP	CXP85856A-001S	OSD Position	0-63	1	(38)	23	0 : Not Available , 1 : Left , 63 : Right
	PDPS		PIP Display Position Start	0-63	1	(35)	36	0 : Not Available , 1 : Left , 63 : Right
	PDP0		PIP Display Position 0	0-3	0	(1)	1	Shift to Right by 1 font
	PDP1		PIP Display Position 1	0-7	0	(4)	4	Shift to Right by 1 font
	PDP2		PIP Display Position 2	0-7	0	(4)	4	Shift to Right by 1 font
	KILS		Color Killer SW	0, 1	1	1	1	0 : Not Available , 1 : Available
ID	ID-0	ID	ID-0	0-255	25	25	25	fix
	ID-1		ID-1	0-255	63	63	63	fix
	ID-2		ID-2	0-255	47	47	47	fix
	ID-3		ID-3	0-255	0	0	0	fix
	ID-4		ID-4	0-255	155	155	155	32″/34″ : 27, 35″/37″ : 155
	ID-5		ID-5	0-255	143	143	143	fix
	ID-6		ID-6	0-255	6	6	6	fix
	ID-7		ID-7	0-255	32	32	32	fix

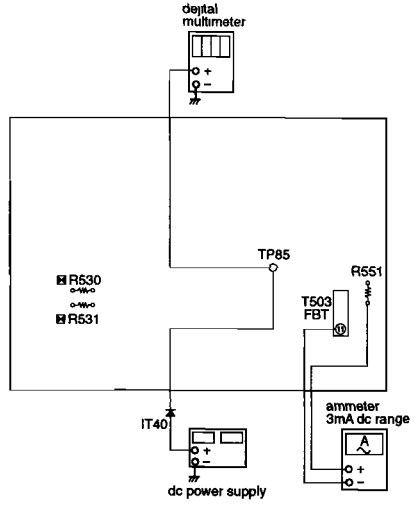
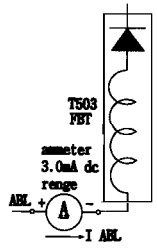
: Fix

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
SUB CON ADJUSTMENT (SCON) 1. Input a *signal. 2. Set COLOR = min, PICTURE = max. " G " = " 0 " (OFF), " R " = " 0 " (OFF). 3. Set to Service adjustment Mode and Connectan *oscilloscope pin ① of CN351. 4. Select " SCON " with [1] and [4] . 5. Adjust with [3] and [6] for the 1.85 ± 0.05Vp-p of level. 6. Write into the memory by [MUTING] then [ENTER] .	*75%Color-bar pattern	*CN351 Pin ①		ILLUSTRATION AND SHAPE AND NUMBER 
SUB HUE, SUB COLOR ADJUSTMENT (SHUE, SCOL) 1. Input a *signal. 2. Set to service adjustment Mode and set to picture = max, color = standard. 3. Connect an *oscilloscope *Connector Pin (B OUT) of C board. 4. Select SHUE and SCOL with [1] and [4] . 5. Adjust with [3] and [6] for the V1 = V4 (SCOL) and V2 = V3 (SHUE). 6. After adjust write SCOL and SHUE data 1 step down. 7. Write into the memory by pressing [MUTING] then [ENTER] .	*Color-bar pattern *Oscilloscope	*CN351 Pin ③		
H SIZE ADJUSTMENT (HSIZ) 1. Input a *signal. 2. Set to Service adjustment Mode. 3. Select HSIZ with [1] and [4] . 4. Adjust with [3] and [6] for the best Horizontal size. 5. Write the memory by pressing [MUTING] then [ENTER] .	*Color-bar pattern		HSIZ	H. SIZE 

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
V. SIZE ADJUSTMENT (VSIZ) 1. Input a *signal. 2. Set to service adjustment Mode. 3. Select VSIZ with [1] and [4]. 4. Adjust with [3] and [6] for the best vertical size. 5. Write into the memory by pressing [MUTING] then [ENTER].	*Cross-hatch pattern		VSIZ	V. SIZE 
V. POSITION ADJUSTMENT (VPOS) 1. Input a *signal. 2. Set to service adjustment Mode. 3. Select VPOS with [1] and [4]. 4. Adjust with [3] and [6] for the best vertical center. 5. Write into the memory by pressing [MUTING] then [ENTER].	*Cross-hatch pattern		VPOS	V. POSITION 
H. POSITION ADJUSTMENT (H POS) Note : Perform this adjustment after H. FREQUENCY ADJUSTMENT (HFRE). 1. Input a *signal. 2. Set the Service adjustment Mode. 3. Select HPOS with [1] and [4]. 4. Adjust with [3] and [6] for the best horizontal center. 5. Write into the memory by pressing [MUTING] then [ENTER].	*Cross-hatch pattern		HPOS	H. POSITION 

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
V LINEARITY (VLIN), V CORRECTION (VSCO), PIN AMP (PAMP), AND PIN PHASE (PPHA) ADJUSTMENTS 1. Input a *signal. 2. Set to Service adjustment Mode. 3. Select VLIN, VSCO, PAMP, and PPHA with [1] and [4]. 4. Adjust with [3] and [6] for the best picture. 5. Write the memory by Pressing [MUTING] then [ENTER].	*Cross-hatch pattern		VLIN VSCO PAMP PPHA VANG VBOW UPIN LPIN	V LINEARITY VS CORRECTION PIN AMP PIN PHASE V ANGLE V BOW UPPER PIN LOW PIN

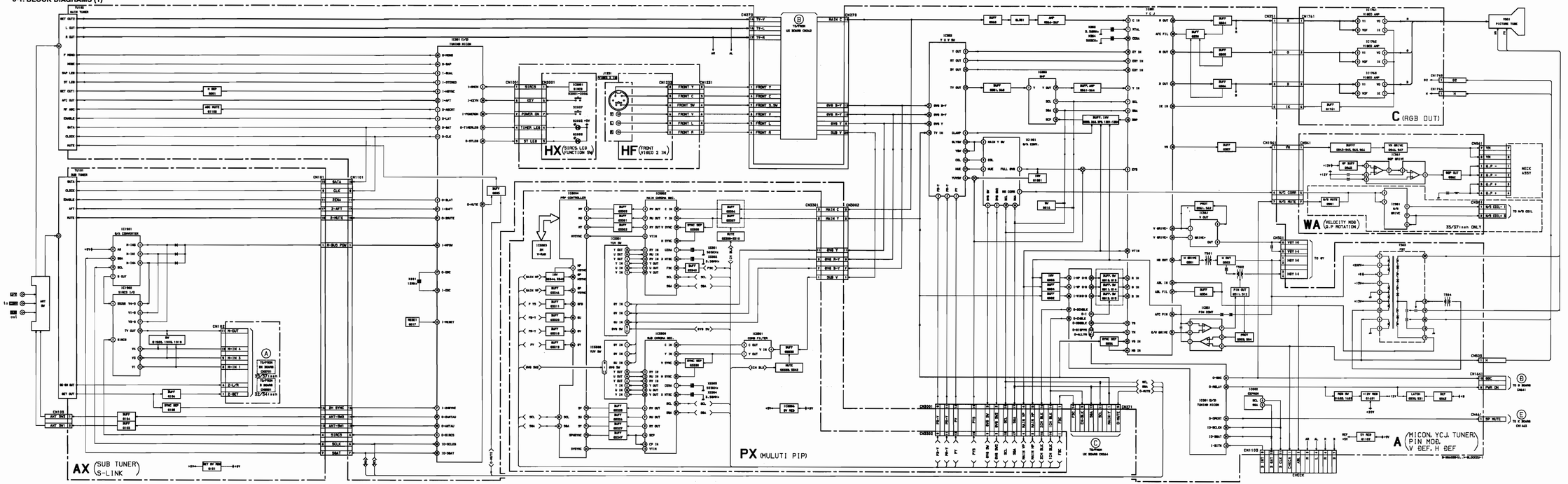
SECTION 4
SAFETY RELATED ADJUSTMENTS

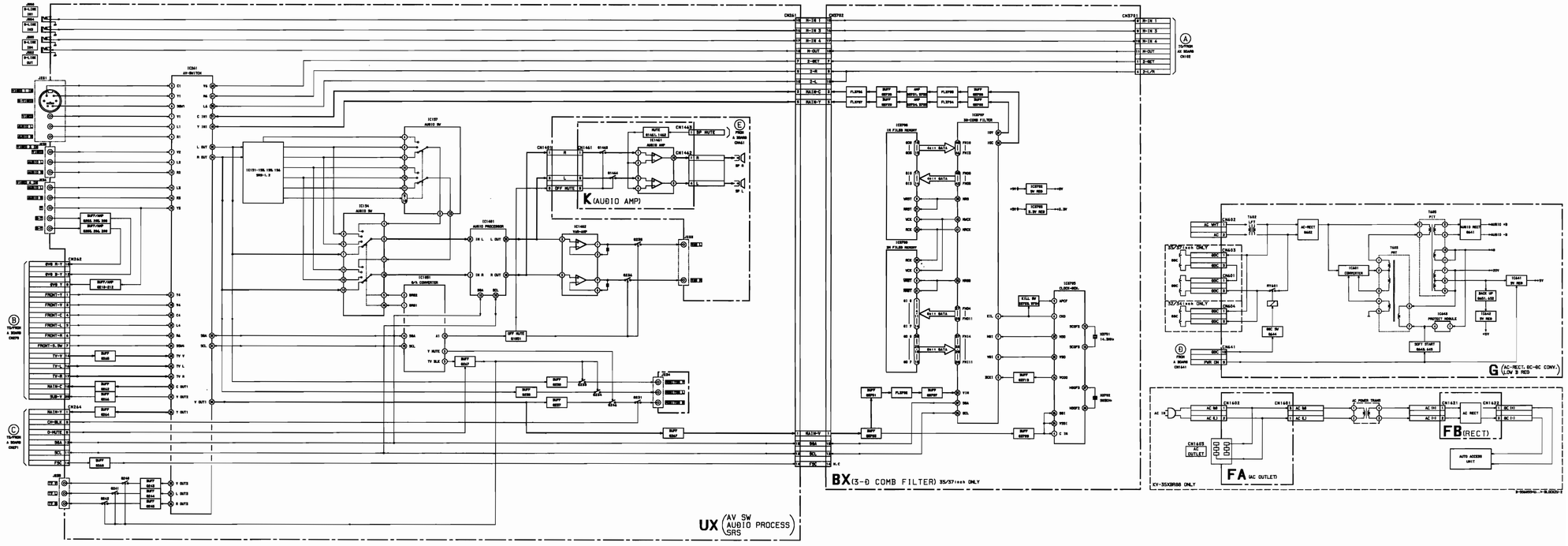
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
⊠ *RESISTOR CONFIRMATION METHOD (HOLD-DOWN CONFIRMATION) AND READJUSTMENTS The following adjustments should always be performed when replacing the following components (*marked with ◪ on the schematic diagram). (Hold-down operation confirmation)		*◪ marked parts IC643,IC351,IC501 D519,D520,D521, C531,C532, R387,R529,R530,R531 R532,R533,R550,R661 T503	*⊠ R530,531	A BOARD - CONDUCTOR SIDE 
Step 1 1. Preparation before confirmation 1) Turn the POWER switch ON, and receive *signal and set the *PICTURE and BRIGHTNESS controls to adjustment. 2) Confirm that the voltage of the check terminal of *TP is more than *voltage when the set is operating normaly with *Power supply.	* White Picture *Digital multimeter	*TP85 (H. PROT)	*VIDEO MODE : STANDARD PICTURE BRIGHTNESS } .....maximum	[Check Condition]Step 1 *32" : more than 21.5V DC 35" : more than 18.0V DC *120 ± 2.0 VAC (Power Supply)
Step 2 2.Confirm that a voltage of between TP85 and ground.	* White Picture		 Connector a Ammeter to the location of R551 space. After the current measurement, put back the resistors.	[Check Condition]Step 2 *IABL 32" : 2000 ± 100 μA 35" : 2160 ± 100 μA *120 ± 2.0 V AC (Power Supply)
Step 3 3.Using an external DC power supply, apply voltage between TP 85 and groud. Increase gradually the voltage and confirm that the hold-down works (Raster disappears) at lower than the voltag obtained Step 2 mentioned above *voltage.			*VIDEO MODE : STANDARD PICTURE BRIGHTNESS .....maximum	[Check Condition]Step 3 *32" : lower than 26.95V DC 35" : lower than 22.05V DC *120 ± 2.0 V AC (Power Supply)
Step 4 4.Confirm that a voltage of more than *voltage appears TP85 and ground.	* White Picture			[Check Condition]Step 4Step 4 *32" : more than 21.5V DC 35" : more than 18.0V DC *120 ± 2.0 V AC (Power Supply)

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
B+ VOLTAGE CONFIRMATION The following adjustments should always be performed when replacing the following *components.		*IC643, R661		
1) Supply *Voltage AC to with *variable auto-transformer. 2) Input an entirely *signal. 3) Set the PICTURE control and the BRIGHTNESS control to adjustment.	*Variable auto-transformer *Monoscope pattern		*VIDEO MODE : STANDARD PICTURE BRIGHTNESS ... .initial reset	*130 $^{+20}_{-0}$ V AC
4) Confirm the voltage of *TP is less than *Voltage DC. 5) If step 4) is not satisfied, replace the *components repeat above steps.		*G Board CN641 Pin ① - ground	*R661	*Less than 136.5 VDC

SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAMS (1)




UX (AV SW AUDIO PROCESS SRS)
K (AUDIO AMP)
BX (3-D COMB FILTER) 35/37inch ONLY
G (AC-RECT, DC-DC CONV., L/W & RED)
FB (RECT)
FA (AC OUTLET)
FA (AC OUTLET) KV-35XBR88 ONLY

A [MICON, Y/C/J, TUNER, H/V DEF, PIN-MOD]

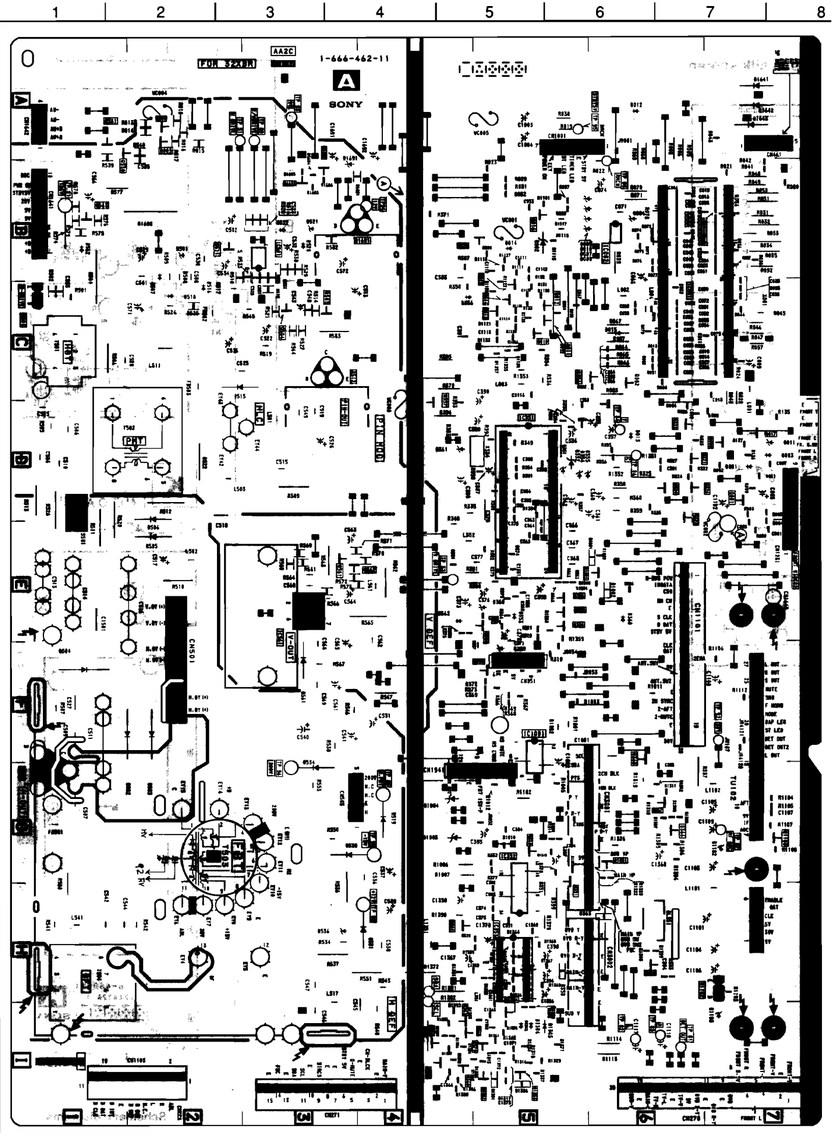
– A BOARD – (KV-32XBR48/34XBR48C)

A BOARD

DIODE		*
D001	B-5	–
D002	B-5	–
D003	D-8	–
D004	D-6	–
D011	D-8	–
D012	A-6	–
D013	D-6	–
D014	C-5	–
D015	C-6	–
D353	F-5	–
D356	C-5	–
D360	F-5	–
D362	F-5	–
D363	F-5	–
D368	F-6	–
D501	C-2	–
D502	G-2	–
D503	G-2	–
D504	F-1	–
D505	E-2	–
D506	E-2	–
D507	C-2	–
D515	D-3	–
D516	C-2	–
D518	C-2	–
D519	H-4	–
D520	C-3	–
D521	B-3	–
D522	B-3	–
D530	H-4	–
D531	I-4	–
D534	G-3	–
D536	C-5	–
D561	F-3	–
D562	E-4	–
D1001	E-6	③
D1002	F-6	③
D1003	H-5	–
D1004	H-5	–
D1102	H-7	–
D1103	I-7	–
D1301	J-5	③
D1302	J-5	–
D1304	J-5	–
D1305	J-5	–
D1306	J-5	⑤
D1641	A-7	–
D1642	A-7	–
D1691	B-4	–

IC		
IC001	C-7	
IC002	B-6	
IC351	E-5	
IC352	H-5	
IC353	I-5	
IC501	C-3	

IC561	F-3	
IC1001	G-5	
TRANSISTOR		*
Q001	E-7	①
Q002	C-6	①
Q003	B-2	①
Q004	A-2	①
Q005	D-7	①
Q010	C-5	①
Q011	C-5	①
Q012	C-5	①
Q013	C-5	①
Q014	C-5	①
Q015	C-5	①
Q016	B-5	①
Q017	D-7	①
Q304	F-6	①
Q305	F-6	①
Q306	F-6	①
Q351	H-6	①
Q354	F-5	①
Q356	D-6	①
Q357	D-4	①
Q358	F-5	①
Q359	J-5	①
Q360	J-5	①
Q361	I-5	①
Q362	J-5	①
Q363	J-5	①
Q364	J-4	①
Q365	I-6	①
Q366	H-7	①
Q367	H-7	①
Q368	G-6	①
Q369	H-5	①
Q370	J-5	①
Q501	C-1	–
Q502	G-1	–
Q503	C-4	①
Q504	C-3	①
Q511	C-3	①
Q512	D-4	–
Q530	B-2	①
Q531	B-2	①
Q561	E-4	①
Q562	E-4	①
Q563	B-1	①
Q1001	E-6	①
Q1102	I-7	–
Q1103	H-8	①
Q1351	H-6	①
Q1352	J-5	①
Q1353	J-5	①
Q1354	I-5	①
Q1691	B-4	–
Q1692	B-3	①
Q1693	B-3	②



NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

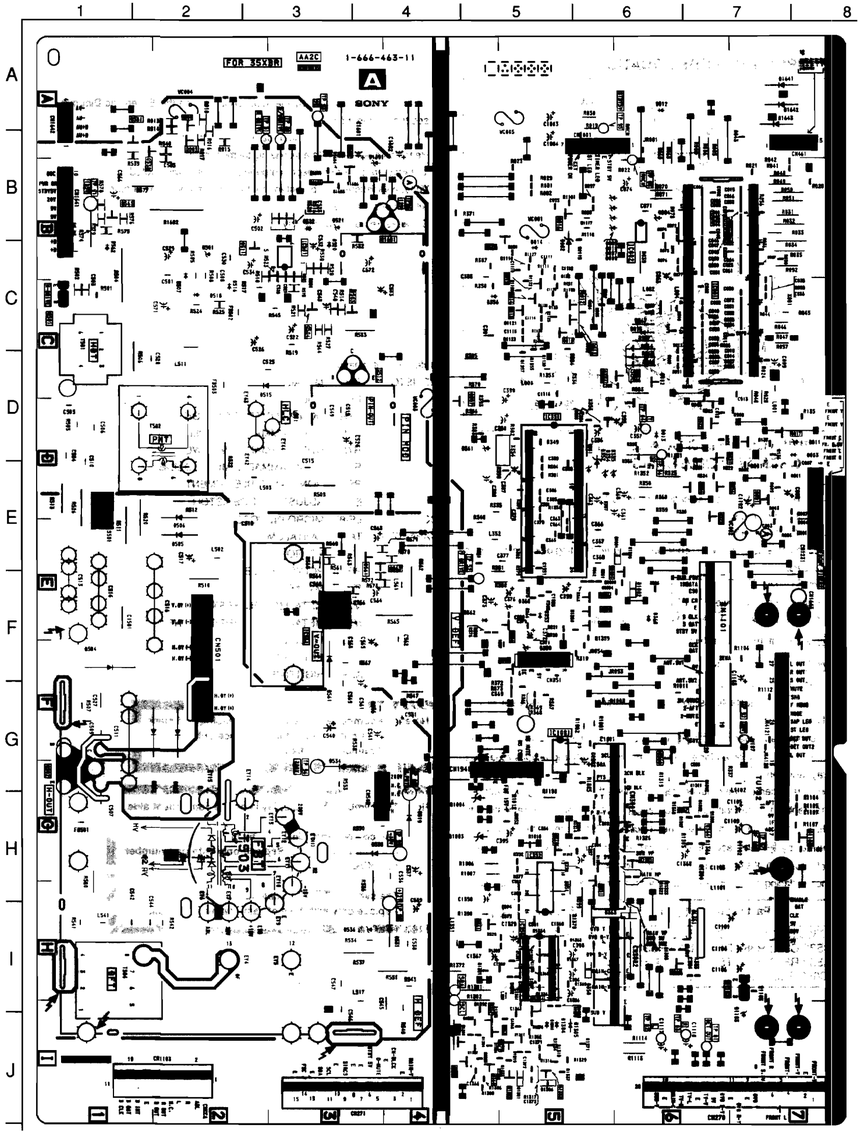
– A BOARD – (KV-35XBR48/35XBR88/37XBR48M)

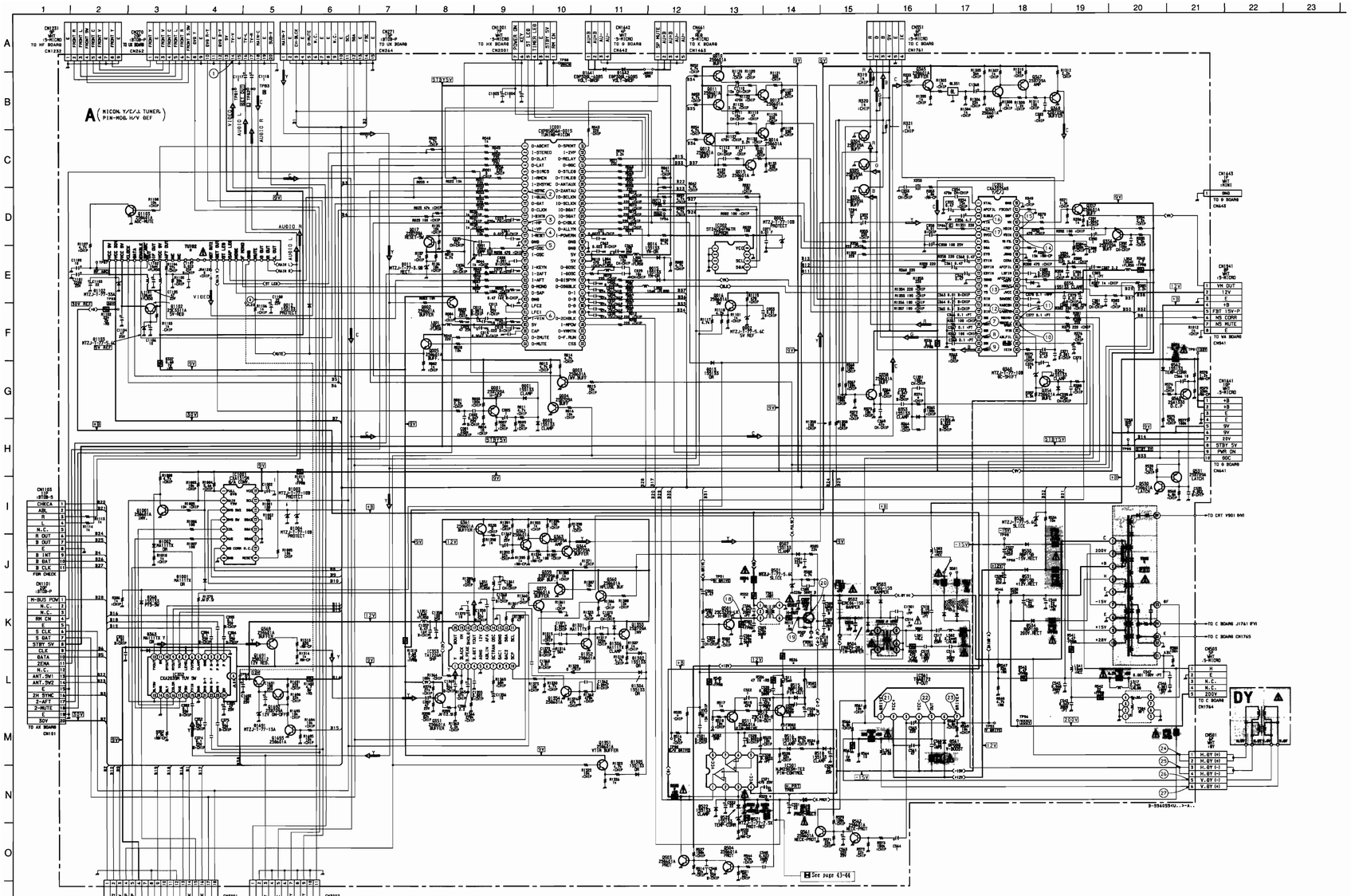
A BOARD

DIODE		*
D001	B-5	–
D002	B-5	–
D003	D-8	–
D004	D-6	–
D011	D-8	–
D012	A-6	–
D013	D-6	–
D014	C-5	–
D015	C-6	–
D353	F-5	–
D356	C-5	–
D360	F-5	–
D362	F-5	–
D363	F-5	–
D368	F-6	–
D501	C-2	–
D502	G-2	–
D503	G-2	–
D504	F-1	–
D505	E-2	–
D506	E-2	–
D507	C-2	–
D515	D-3	–
D516	C-2	–
D518	C-2	–
D519	H-4	–
D520	C-3	–
D521	B-3	–
D522	B-3	–
D530	H-4	–
D531	I-4	–
D534	G-3	–
D536	C-5	–
D561	F-3	–
D562	E-4	–
D1001	E-6	③
D1002	F-6	③
D1003	H-5	–
D1004	H-5	–
D1102	H-7	–
D1103	I-7	–
D1301	J-5	③
D1302	J-5	–
D1304	J-5	–
D1305	J-5	–
D1306	J-5	③
D1641	A-7	–
D1642	A-7	–
D1691	B-4	–

IC		
IC001	C-7	
IC002	B-6	
IC351	E-5	
IC352	H-5	
IC353	I-5	
IC501	C-3	

IC561	F-3	
IC1001	G-5	
TRANSISTOR		*
Q001	E-7	①
Q002	C-6	①
Q003	B-2	①
Q004	A-2	①
Q005	D-7	①
Q010	C-5	①
Q011	C-5	①
Q012	C-5	①
Q013	C-5	①
Q014	C-5	①
Q015	C-5	①
Q016	B-5	①
Q017	D-7	①
Q304	F-6	①
Q305	F-6	①
Q306	F-6	①
Q351	H-6	①
Q354	F-5	①
Q356	D-6	①
Q357	D-4	①
Q358	F-5	①
Q359	J-5	①
Q360	J-5	①
Q361	I-5	①
Q362	J-5	①
Q363	J-5	①
Q364	J-4	①
Q365	I-6	①
Q366	H-7	①
Q367	H-7	①
Q368	G-6	①
Q369	H-5	①
Q370	J-5	①
Q501	C-1	–
Q502	G-1	–
Q503	C-4	①
Q504	C-3	①
Q511	C-3	①
Q512	D-4	–
Q530	B-2	①
Q531	B-2	①
Q561	E-4	①
Q562	E-4	①
Q563	B-1	①
Q1001	E-6	①
Q1102	I-7	–
Q1103	H-8	①
Q1351	H-6	①
Q1352	J-5	①
Q1353	J-5	①
Q1354	I-5	①
Q1691	B-4	–
Q1692	B-3	①
Q1693	B-3	②





A BOARD IC VOLTAGE LIST

IC001	1	0		3	GND	
	2	0		4	GND	
	3	0		5	4.7	
	4	0		6	4.7	
	5	0		7	GND	
	6	4.8		8	5.1	
	7	0.2	IC351	1	2.1	
	8	0.2		2	5.7	
	9	1.7		3	4.1	
	10	0.2		4	4.6	
	11	0		5	4	
	12	5.1		6	9.1	
	13	4.2		7	4.8	
	14	1.3		8	4.7	
	15	5.1		9	0	
	16	GND		10	6.6	
	17	2.6		11	6.2	
	18	*		12	6.3	
	19	0.8		13	GND	
	20	5.1		14	0	
	21	2.5		15	0	
	22	2.4		16	5.2	
	23	0		17	5.2	
	24	0		18	5.2	
	25	GND		19	5.2	
	26	1.8		20	1.8	
	27	2.7		21	5.4	
	28	2.4		22	1.7	
	29	5.1		23	5.5	
	30	1		24	1.8	
	31	0		25	3.4	
	32	0		26	1.6	IC501
	36	1.6		27	8.1	
	37	0		28	0.8	
	38	0		29	2.1	
	39	0		30	3.2	
	40	0		31	3.9	
	41	0		32	4.5	
	42	0		33	4.8	
	43	0		34	9.2	IC561
	44	2.9		35	3.7	
	45	2.9		36	3.6	
	46	5		37	4.1	
	47	5		38	4.4	
	48	GND		39	2.5	
	49	GND		40	GND	
	50	5.1		41	2.8	IC1001
	51	0		42	2.9	
	52	0		43	4.1	
	53	4.7		44	3.3	
	54	4.7		45	6.2	
	55	4.7		46	0.8	
	56	4.7		47	0	
	57	5.1		48	GND	
	58	0.2	IC352	1	6.1	
	59	4.3		2	6.1	
	60	0.4		3	6.1	
	61	0		4	GND	
	62	4.9		5	2.1	
	63	1.8		6	1.7	
	64	0		7	9.2	
IC002	1	GND		8	4	
	2	GND		9	4.2	
				10	4	
				11	9.2	
				12	3.6	
				13	0.4	
				14	GND	
				15	2.5	
				16	5.6	
				17	4.7	
				18	0.4	
				19	6.2	
				20	GND	
				21	5.9	
				22	5.9	
				23	5.9	
				24	9.2	
			IC353	1	5.1	
				2	4.2	
				3	5.5	
				4	5.2	
				5	GND	
				6	4.7	
				7	5.1	
				10	1.3	
				11	5	
				12	4.9	
				13	GND	
				14	12.4	
				15	6.2	
				16	12.7	
				17	8.4	
				18	2.6	
			IC501	1	3.8	
				2	9.4	
				3	8.9	
				4	-10.2	
				5	2.5	
				6	3.3	
				7	-16	
				8	12.7	
			IC561	1	1.5	
				2	12.7	
				3	-14.3	
				4	-18.2	
				5	0.3	
				6	13.5	
				7	1.5	
			IC1001	1	0.3	
				2	0.2	
				3	0.5	
				4	0.5	
				5	5.6	
				6	4.7	
				7	4.8	
				8	GND	
				9	9.4	
				11	GND	
				12	GND	
				13	GND	
				14	4.8	
				15	4.7	
				16	9.4	

All Voltage are in V

Pin numbers which are not described are not used.

* : Can not measured

A BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q001	5.1	0.8	5.1
Q002	5.0	9.5	4.3
Q003	-0.5	4.2	GND
Q004	0.8	GND	1.3
Q005	0	5.1	0
Q010	0	9.5	0
Q011	0	9.5	0
Q012	0	9.5	0
Q013	0	0	GND
Q014	0	0	GND
Q015	0	0	GND
Q016	6.1	9.2	5.4
Q017	4.5	4.5	5.2
Q304	1.8	GND	2.5
Q305	1.8	GND	2.3
Q306	1.7	GND	2.4
Q351	8.6	9.2	6.0
Q354	0	GND	-0.5
Q356	5.2	GND	5.8
Q357	3.8	9.5	0
Q358	2.3	9.1	2.5
Q359	1.2	GND	1.9
Q360	0.3	12.6	0.9
Q361	8.2	12.6	7.5
Q362	3.6	11.7	3.0
Q363	11.7	5.6	12.4
Q364	5.6	GND	6.3
Q365	5.1	9.2	4.5
Q366	2.6	8.3	2.0
Q367	8.3	3.4	8.9
Q368	3.3	GND	4.0
Q369	3.6	9.2	2.8
Q370	1.9	12.6	1.3
Q501	-1.0	114.0	GND
Q502	0	140.0	GND
Q503	0	8.7	GND
Q504	-0.9	0	-1.6
Q511	-16.2	-12.6	-16.4
Q512	-16.6	16.0	-16.4
Q530	0	3.6	GND
Q531	3.6	0	3.6
Q561	0	3.1	GND
Q562	0	0	GND
Q563	139.0	-9.2	139.0
Q1001	0.3	2.2	GND
Q1102	8.0	8.8	5.3
Q1103	0	2.6	GND
Q1351	0.7	9.2	0.5
Q1352	-1.1	11.1	GND
Q1353			
Q1354	-0.1	0	GND
Q1691	13.3	16.4	12.6
Q1692	12.6	13.3	13.4
Q1693	0.7	0	GND

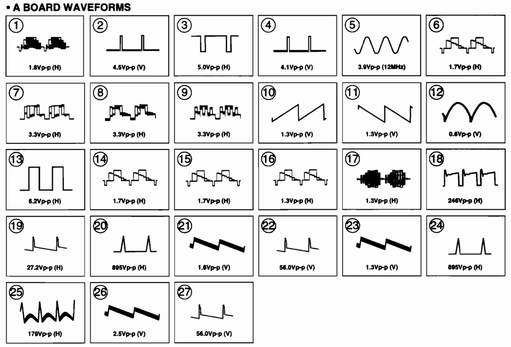
All Voltage are in V

A BOARD * MARK LIST

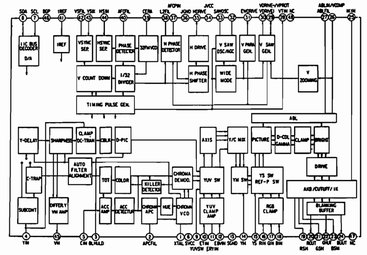
	KV-35XBR48/36XBR80/37XBR48M	KV-32XBR48/34XBR48C
CS13	0.033 630V PP	0.056 400V PP
CS14	0.82 200V PP	0.62 200V PP
C1501	-	0.12 200V PP
Q502	2SC5148	2SC5148
R374	2.2M CHIP	1M CHIP
R511	100 2W RS	68 2W RS
R526	10 2W RS	2W (7.5)
R529	18K RN-CIP	22K RN-CIP
R531	220K RN-CIP	68K RN-CIP
R533	33K 1W RS	47K 1W RS
R535	180K CHIP	150K CHIP
R546	20K RN	22K RN
T500	500UH PMT	400UH PMT
T503	NX-2612	NX-3005

- : Not mounted

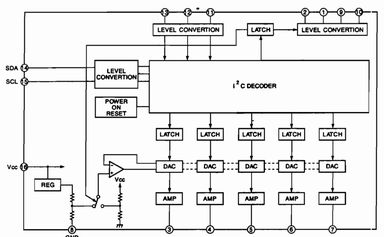
A BOARD WAVEFORMS



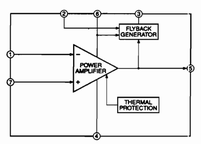
A BOARD : IC351 CXA2025AS



A BOARD : IC1001 CXA 1315M



A BOARD : IC561 TDA8172

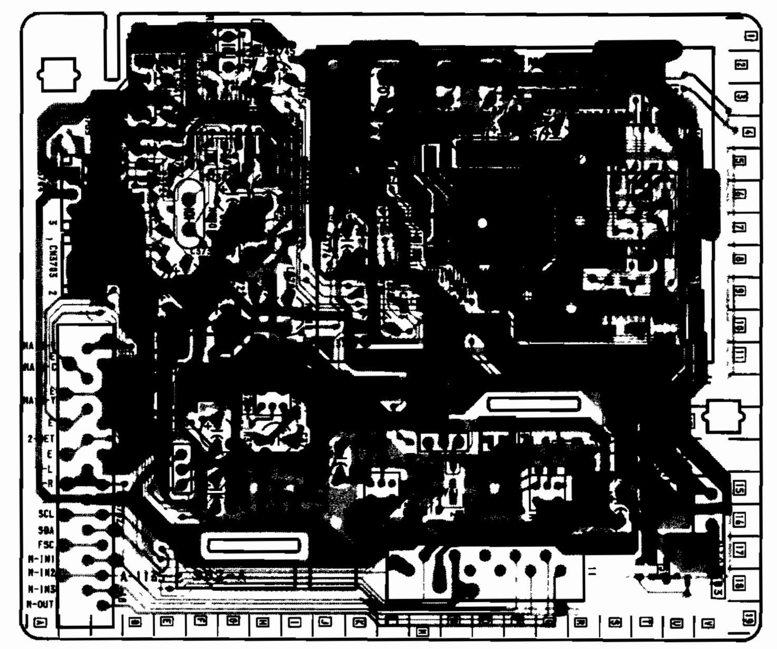


BX [DIGITAL COMB FILTER]

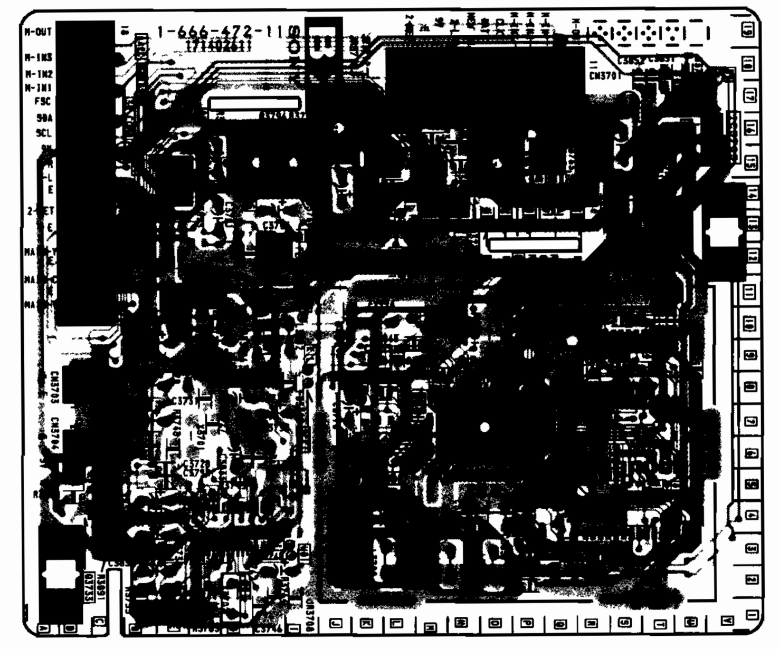
– BX BOARD –

BX BOARD

DIODE		*
D3704	A-3	③
D3705	E-4	③
D3706	A-4	③
D3707	E-4	③
D3708	A-4	③
I C		
IC3702	B-2,F-2	
IC3703	C-4,E-4	
IC3705	A-2	
IC3707	B-3	
IC3708	A-4	
IC3709	B-4	
TRANSISTOR		*
Q3701	C-2	②
Q3702	E-3	①
Q3703	C-1	②
Q3707	B-2	②
Q3708	E-4	①
Q3709	B-2	②
Q3719	A-2	②
Q3724	E-2	②
Q3725	E-2	②
Q3728	E-3	①
Q3729	E-2	①
Q3731	E-3	①
Q3732	E-3	①
Q3733	G-1	①
Q3734	G-1	②



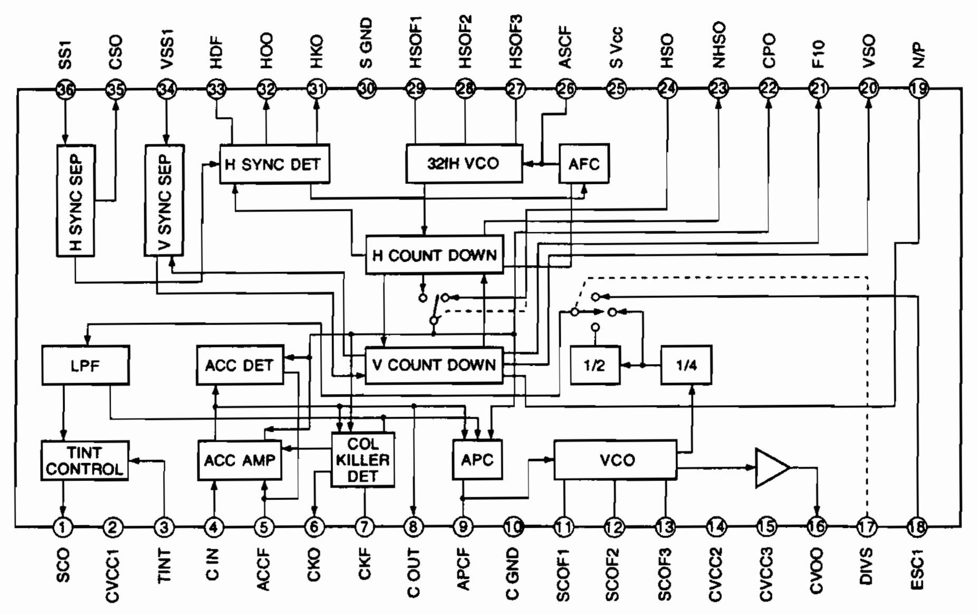
< Component Side >



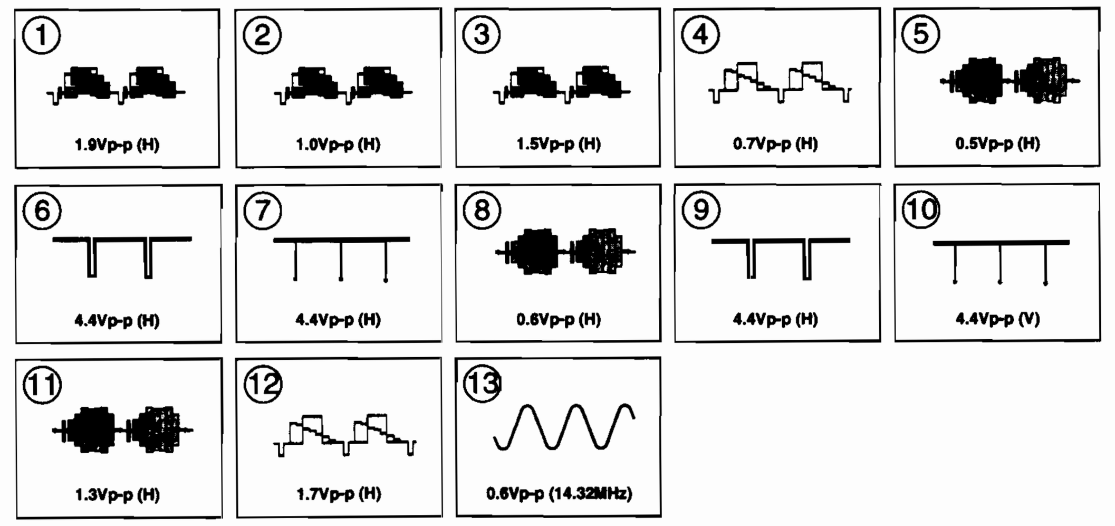
< Conductor Side >

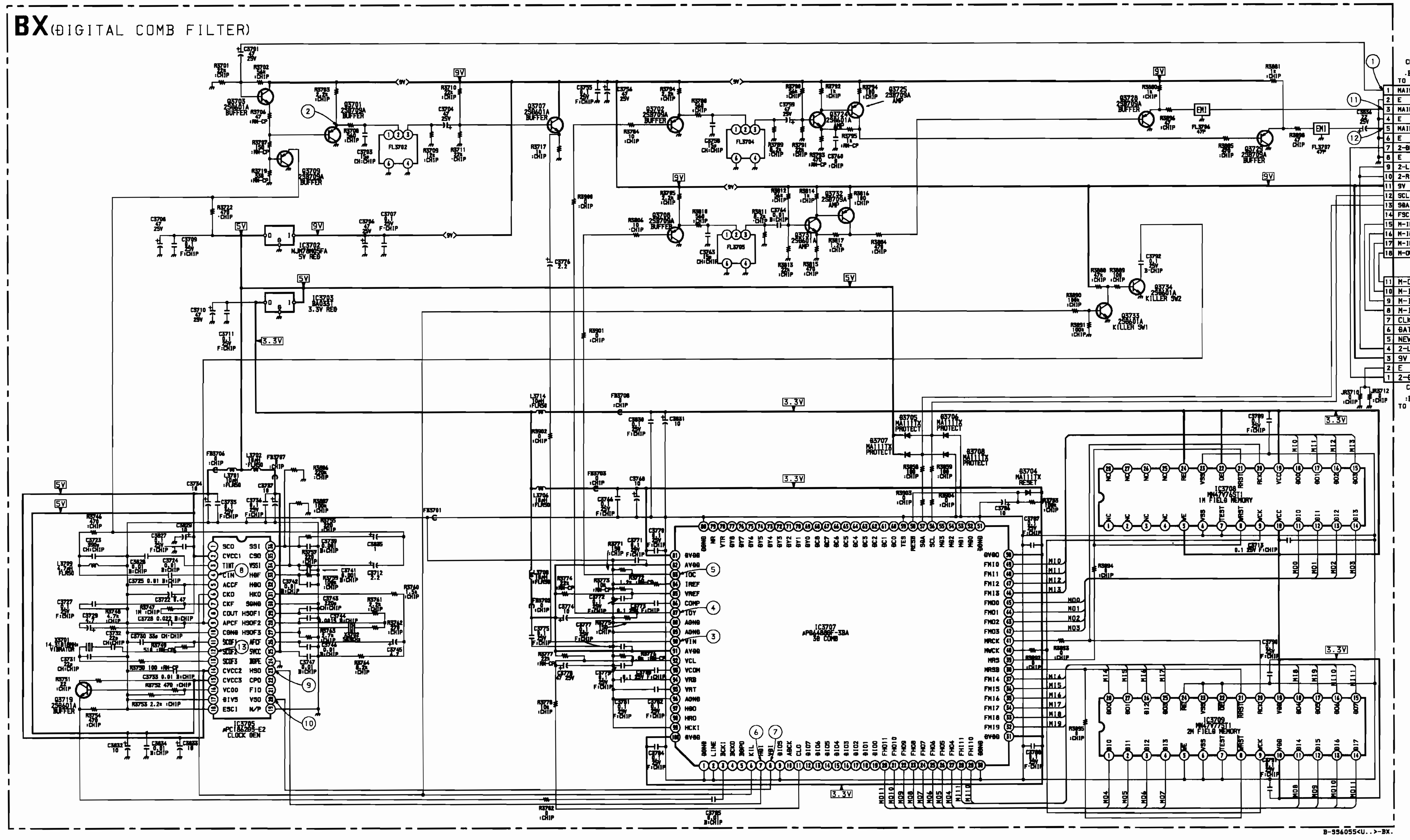
NOTE:
• ▬ : Pattern from the side which enables seeing
• ▬ : Pattern of the rear side

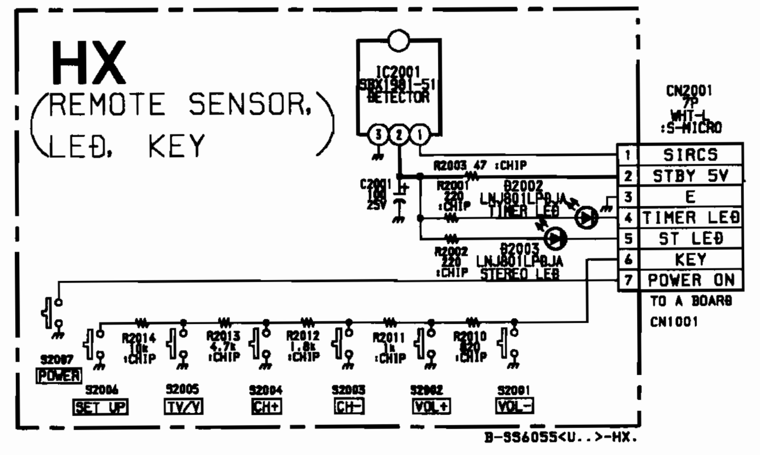
BX BOARD : IC3702 μPC1862GS-E2



• BX BOARD WAVEFORMS







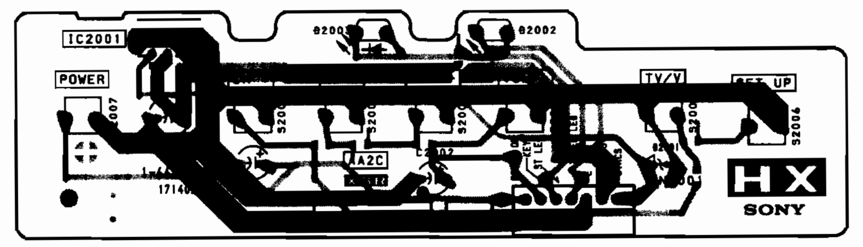
HX BOARD IC VOLTAGE LIST

IC2001	1	5.2
	2	5.2
	3	GND

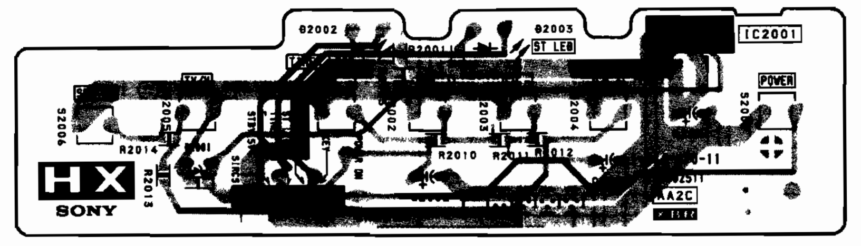
All Voltage are in V
Pin numbers which are not described are not used.

HX [REMOTE SENSOR, LED, KEY] (KV-35XBR88 ONLY)

– HX BOARD –

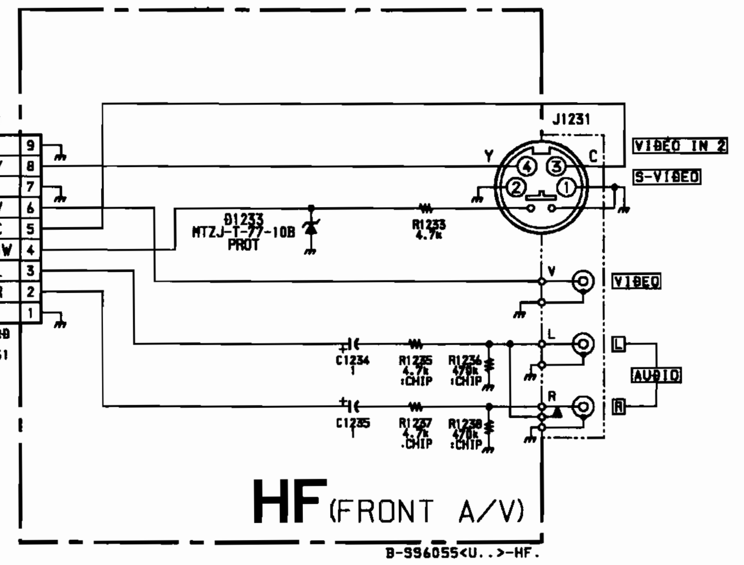


< Component Side >



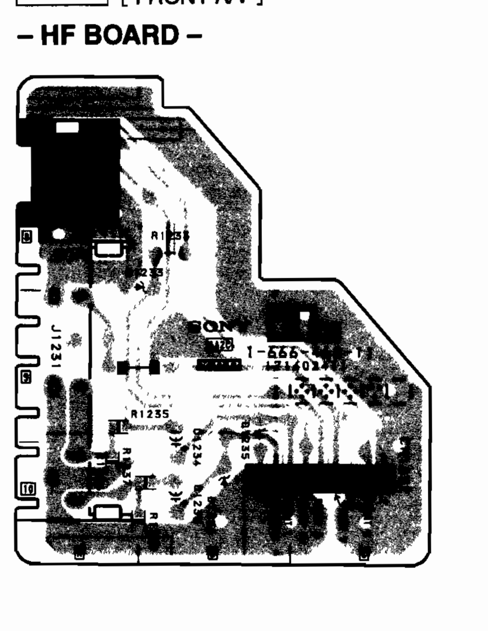
< Conductor Side >

NOTE:
• ▬ : Pattern from the side which enables seeing
• ▬ : Pattern of the rear side.



HF [FRONT A/V]

– HF BOARD –



BX BOARD IC VOLTAGE LIST

IC3702	I	8.7		49	1.6
	O	5.3		50	3.5
	G	GND		51	GND
IC3703	I	5.3		56	4.7
	O	3.5		57	4.7
	G	GND		58	3.4
IC3705	2	4.4		59	GND
	3	2.3		80	GND
	4	0.3		81	3.5
	5	4.3		82	3.5
	6	0		83	0.6
	7	5.3		84	1.1
	9	3		85	1.1
	10	4		86	1.9
	11	4		87	0.5
	12	0		88	GND
	13	0		89	GND
	14	5.3		90	1.3
	15	4.4		91	3.5
	16	2.8		92	0.6
	17	4.4		93	1.6
	18	2.9		94	1.1
	19	GND		95	2
	20	5.3		96	GND
	23	1.1		99	GND
	24	GND		100	3.5
	25	2.4	IC3708	5	3.5
	26	2.6		6	GND
	27	2.9		7	GND
	28	0		8	0
	29	3.1		9	1
	30	GND		10	3.5
	31	3.3		11	1.6
	33	5.3		12	1.6
	34	2.2		13	1.7
	36	0		14	1.5
IC3707	1	GND		15	1.8
	2	GND		16	1.9
	3	1.3		17	1.7
	6	4.5		18	1.6
	7	4.3		19	3.5
	8	4.4		20	1
	9	GND		21	0
	10	1.7		22	3.5
	11	2.3		23	GND
	20	1.1		24	3.5
	21	1.3	IC3709	1	1.6
	22	2.1		2	1.8
	23	1.8		3	1.6
	24	1.5		4	1.5
	25	1.6		5	GND
	26	1.8		6	GND
	27	1.6		7	GND
	28	1.1		8	3.4
	29	1.1		9	1
	30	GND		10	3.5
	31	3.5		11	1.8
	32	2.5		12	2.1
	33	2.2		13	1.3
	34	1.8		14	1.1
	35	1.8		15	1.1
	36	2.2		16	1.1
	37	1.7		17	2.5
	38	3.4		18	2.2
	39	0		19	3.5
	40	1		20	1
	41	1		21	3.4
	42	1.5		22	GND
	43	1.7		23	GND
	44	1.6		24	GND
	45	1.6		25	1.8
	46	1.8		26	1.8
	47	1.9		27	2.2
	48	1.7		28	1.7

All Voltage are in V
Pin numbers which are not not described are not used.

BX BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q3701	1.5	GND	2.1
Q3702	0.4	GND	1.1
Q3703	2.3	8.7	1.7
Q3707	4.2	8.7	3.6
Q3708	0.5	GND	1.2
Q3709	1	GND	1.7
Q3724	2.5	7.7	1.9
Q3725	7.7	4.6	8.4
Q3728	5.1	GND	5.8
Q3729	4.6	GND	5.3
Q3731	2.5	7.7	1.8
Q3732	7.7	5.1	8.5
Q3733	0.7	0	GND
Q3734	0	0	GND

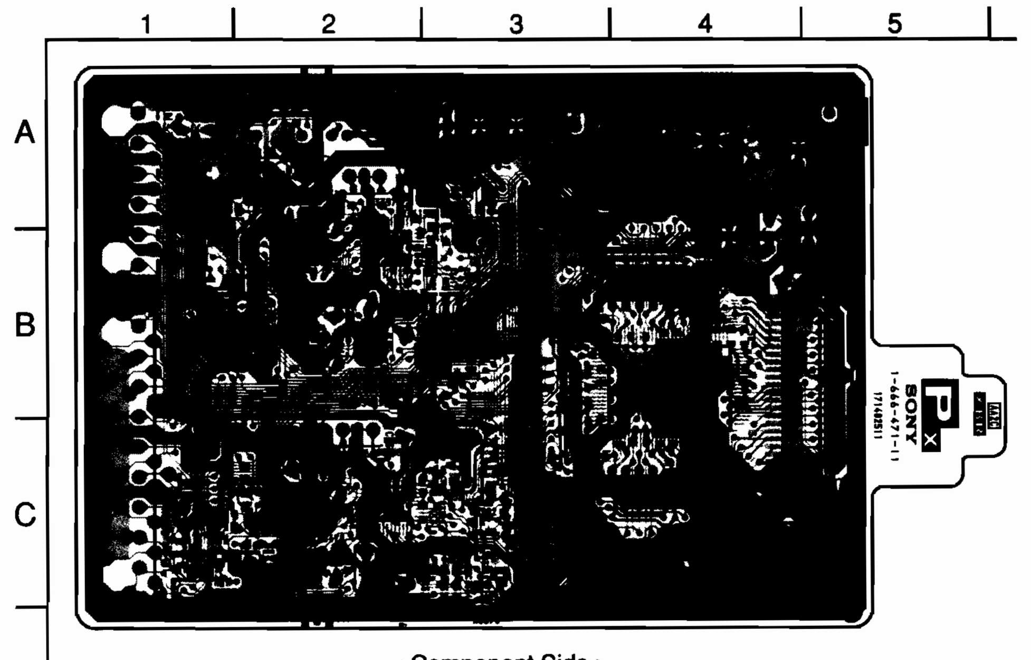
All Voltage are in V

PX BOARD

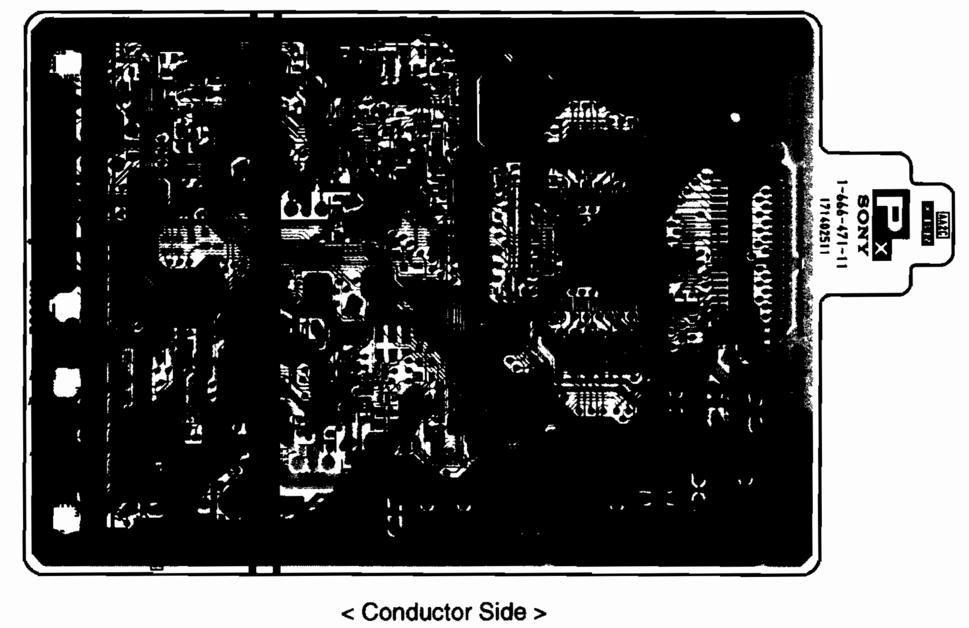
DIODE		*
D3302	C-2	③
D3303	C-2	③
D3313	B-2	③
D3314	B-2	③
I C		
IC3301	C-3	
IC3302	C-2	
IC3303	B-4	
IC3304	B-4	
IC3306	A-3,G-3	
IC3307	B-1	
IC3308	A-3	
IC3309	B-1	
TRANSISTOR		*
Q3301	D-3	①
Q3302	D-3	①
Q3303	D-3	①
Q3305	C-2	①
Q3306	E-2	①
Q3307	C-1	①
Q3308	C-1	①
Q3309	E-1	①
Q3310	D-1	①
Q3311	C-3	①
Q3318	B-3	①
Q3319	B-2	①
Q3320	B-3	①
Q3325	F-3	①
Q3326	F-3	①
Q3327	F-3	①
Q3330	A-2	①
Q3333	G-1	①
Q3339	C-1	①
Q3342	C-1	①
Q3343	B-2	①
Q3344	E-3	①
Q3345	E-3	①
Q3346	E-2	①
Q3347	F-3	①

PX [MULTI PIP]

– PX BOARD –

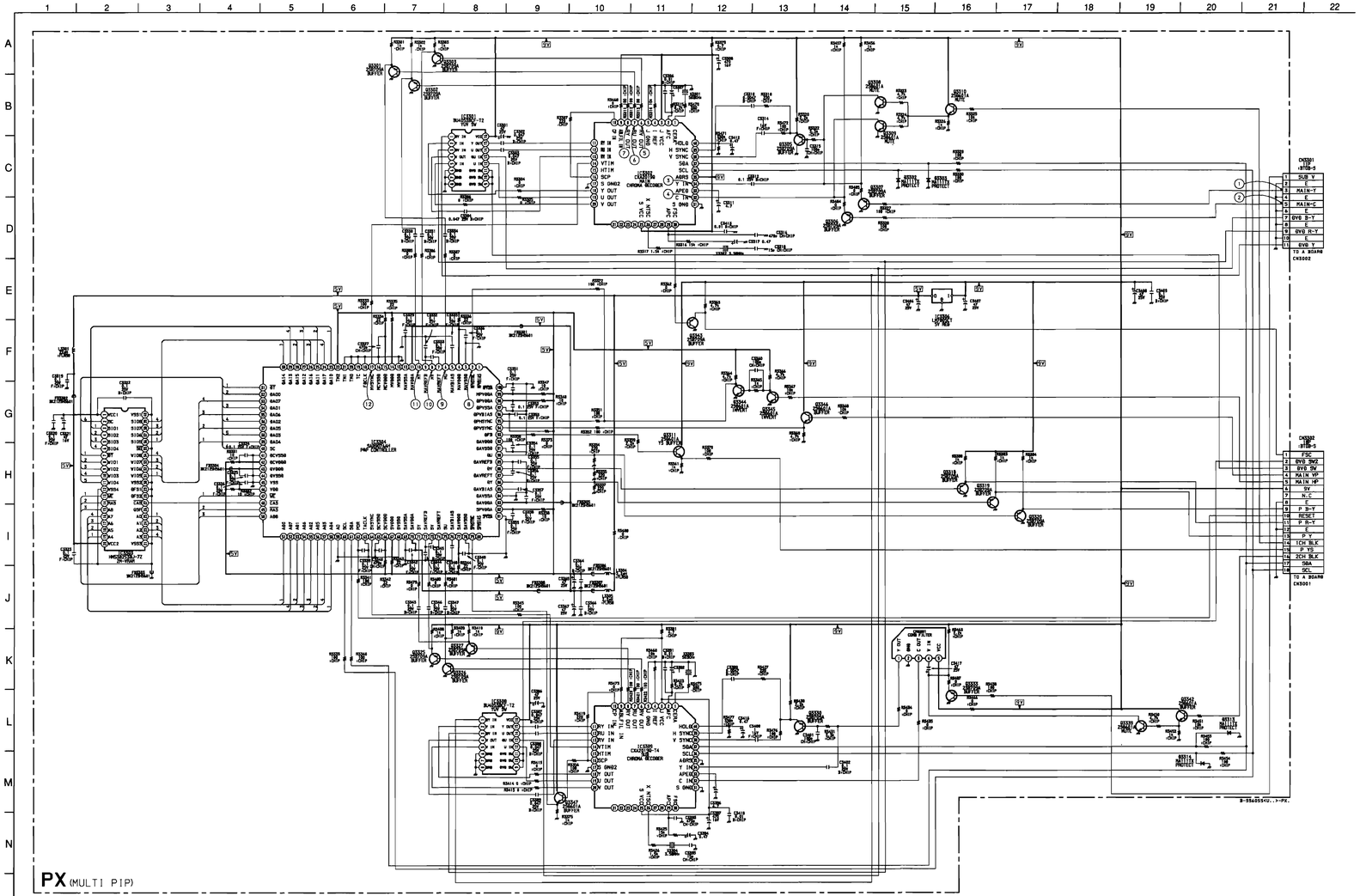


< Component Side >



< Conductor Side >

NOTE:
• ▬ : Pattern from the side which enables seeing
• ▬ : Pattern of the rear side.



PX BOARD IC VOLTAGE LIST

IC3301	1	0.2		13	3.3		36	1.0		98	5.3
	2	0		14	2.0		37	1.0		99	5.3
	3	3.4		15	1.4		38	1.0		100	GND
	4	2.9		16	1.3		39	1.0	IC3306	1	9.0
	5	2.9		17	1.4		40	0		0	5.3
	6	GND		18	1.3		41	GND		0	GND
	7	GND		19	1.3		42	5.1	IC3308	1	0
	8	GND		20	5.3		43	5.3		2	2.9
	9	0		21	GND		44	GND		3	3.4
	10	0		22	1.3		45	GND		4	2.9
	11	0		23	1.3		46	5.3		5	2.9
	12	0		24	1.2		47	3.3		6	GND
	13	3.5		25	1.2		48	3.0		7	GND
	14	2.9		27	3.0		49	2.0		8	GND
	15	3.3		28	GND		50	1.4		9	0.5
	16	9.0		29	GND		51	1.3		10	0.5
IC3302	1	2.3		30	GND		52	1.3		11	0.5
	2	4.1		31	1.0		53	1.3		12	2.9
	3	8.6		32	1.0		54	1.3		13	3.5
	4	1.8		33	0.8		55	1.3		14	2.9
	5	GND		34	0.9		56	1.3		15	2.9
	6	2.9		35	GND		57	1.3		16	9.0
	7	2.9		36	0.3		58	1.3	IC3309	1	2.3
	8	3.3		37	0.2		59	GND		2	4.1
	9	8.6		38	0.3		60	4.7		3	8.6
	10	0.8		39	0.2		61	4.7		4	1.8
	11	4.5		40	GND		62	5.3		5	GND
	12	4.5	IC3304	1	1.7		63	GND		6	2.9
	13	4.5		2	1.0		64	0.3		7	2.9
	14	0.3		3	GND		65	GND		8	2.9
	15	0.8		4	5.1		66	5.0		9	8.7
	16	0.8		5	2.5		67	4.9		10	0.8
	17	GND		6	1.4		68	GND		11	2.9
	18	3.3		7	2.2		69	GND		12	4.3
	19	2.9		8	1.4		70	5.3		13	4.3
	20	2.9		9	0.5		71	0.5		14	0.3
	25	8.6		10	0.9		72	0.5		15	0.8
	26	2.4		11	5.3		73	1.4		16	0.8
	29	5.2		12	GND		74	2.3		17	GND
	30	1.5		13	GND		75	1.4		18	2.6
	31	GND		14	4.9		76	2.5		19	2.9
	32	5.8		15	5.0		77	5.1		20	2.9
	33	4.0		16	GND		78	GND		25	8.7
	34	4.4		17	0.3		79	0.5		26	2.3
	35	8.6		18	GND		80	1.7		29	5.2
	36	4.7		19	GND		81	GND		31	GND
	37	4.7		20	GND		82	5.3		32	4.7
	38	3.8		21	GND		83	5.3		33	3.8
	39	3.2		22	5.3		84	GND		34	3.9
	40	2.7		23	0.4		85	1.1		35	GND
IC3303	1	5.3		24	0.3		86	0.5		36	4.7
	2	0		25	0.3		87	2.4		37	4.7
	3	0.4		26	0.3		88	1.3		38	3.9
	4	0.3		27	0.3		89	0.5		39	3.1
	5	0.3		28	0.3		90	1.3		40	0.8
	6	0.3		29	0.3		91	GND	CM3301	1	4.7
	7	5.3		30	0.3		92	5.3		2	GND
	8	0.9		31	5.3		93	0		3	4.7
	9	0.5		32	0.9		94	0.5		4	4.7
	10	1.0		33	0.9		95	1.0		5	9.0
	11	1.0		34	0.5		96	1.7			
	12	GND		35	0.8		97	GND	All Voltage are in V		

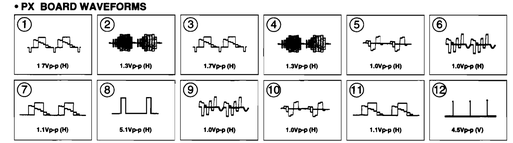
Pin numbers which are not described are not used

PX BOARD TRANSISTOR VOLTAGE LIST

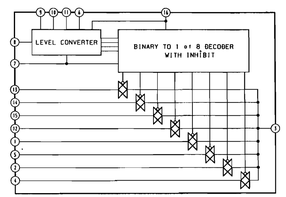
	B	C	E
Q3301	2.9	GND	3.6
Q3302	3.3	GND	3.9
Q3302	2.9	GND	3.6
Q3306	5.8	GND	6.4
Q3306	5.1	GND	5.8
Q3307	5.1	GND	5.8
Q3308	0	5.8	GND
Q3309	0	5.7	GND
Q3310	0	9.0	0
Q3311	0	9.0	0
Q3318	1.3	GND	2.0
Q3319	0.5	GND	1.2
Q3320	1.3	GND	2.0
Q3325	2.9	GND	3.6
Q3326	2.8	GND	3.5
Q3327	2.9	GND	3.5
Q3330	4.8	GND	5.4
Q3333	5.1	GND	5.7
Q3339	0	5.7	GND
Q3342	0	9.0	0
Q3343	1.5	GND	2.2
Q3344	0.7	1.0	GND
Q3345	-0.4	1.3	GND
Q3346	0.7	9.0	0.5
Q3347	0.8	9.0	0.6

All Voltage are in V

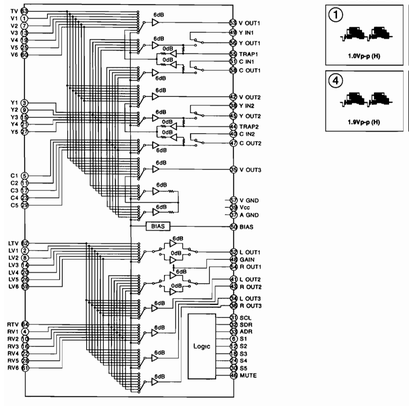
• PX BOARD WAVEFORMS



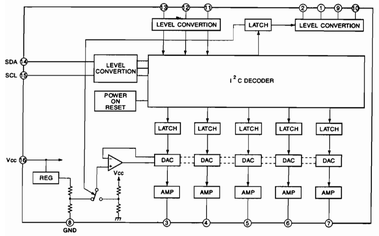
PX BOARD : IC3301 BU4053BCF-T2



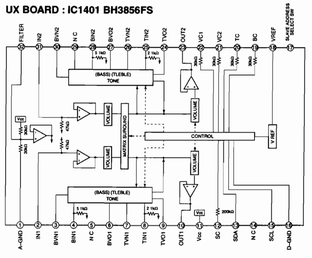
UX BOARD : IC261 CXA1845Q



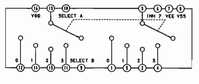
UX BOARD : IC1051 CXA1315M-T4



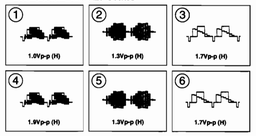
UX BOARD : IC1401 BH3856FS



UX BOARD : IC154 MC14052BFEL



• UX BOARD WAVEFORMS



UX BOARD IC VOLTAGE LIST

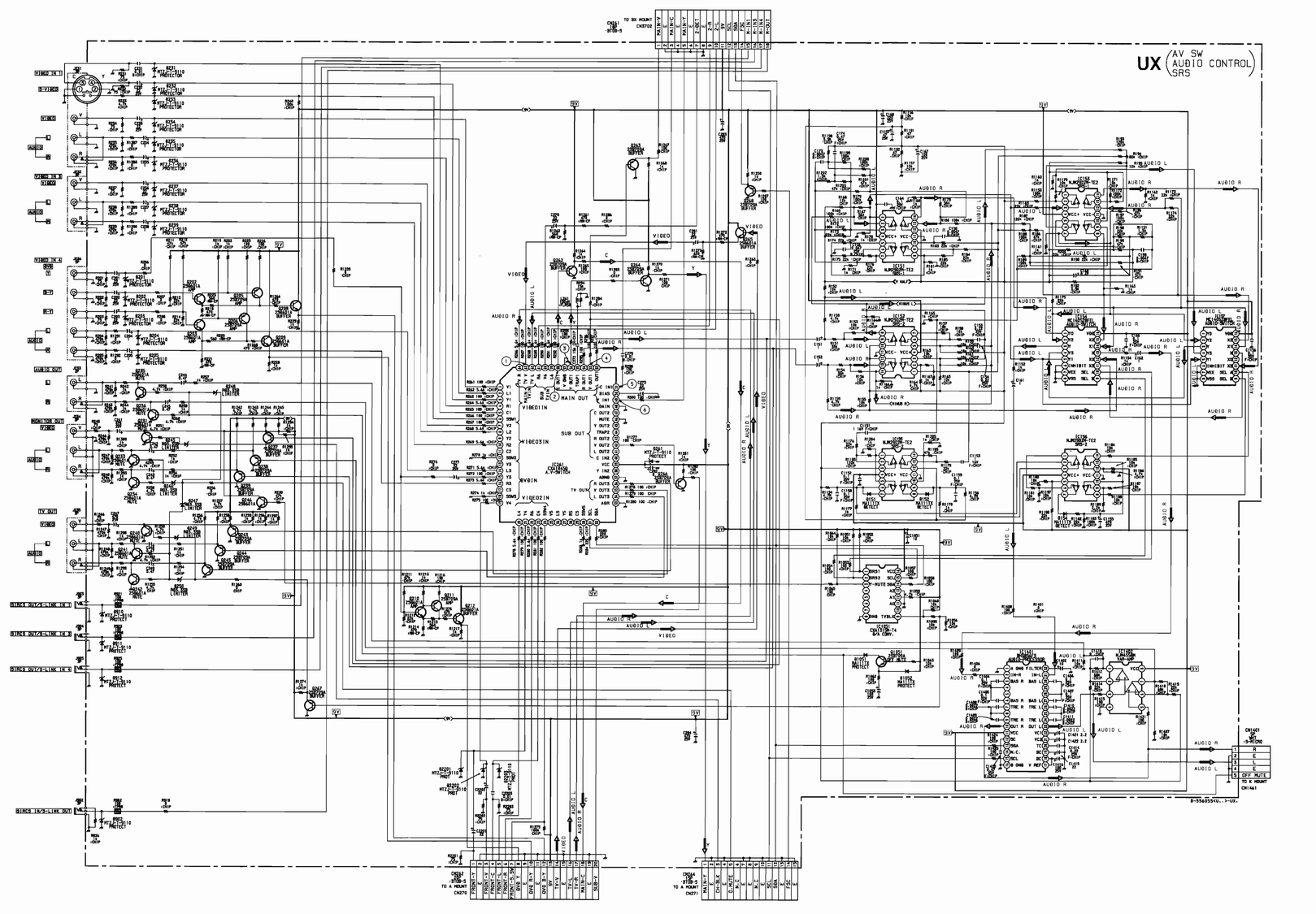
IC151	1	4.4		12	4.5		39	8.9
	2	4.5		13	4.5		42	4.4
	3	4.5		14	4.5		46	GND
	4	8.9	IC156	1	0		48	GND
	5	4.4		2	7.3		49	4.5
	6	4.5		3	7		50	4.5
	7	4.4		4	8.9		51	4.5
	8	4.4		5	2.6		52	4.6
	9	4.5		6	0		53	4.4
	10	4.4		7	7.6		54	4.6
	11	GND		8	7.6		55	4.4
	12	4.5		9	1.7		56	4.5
	13	4.5		10	5.9		57	GND
	14	4.5		11	GND		58	4.5
IC152	1	4.5		12	2.9		59	4.5
	2	4.5		13	5.9		60	4.5
	3	4.5		14	0		61	4.5
	4	8.9	IC157	1	4.4		62	4.5
	5	4.5		2	4.4		63	4.5
	6	4.5		3	4.4	IC1051	64	4.6
	7	4.5		4	4.4		1	0.2
	8	4.5		5	4.4		2	0.2
	9	4.5		6	GND		3	0.4
	10	4.5		7	GND		8	GND
	11	GND		8	GND		9	0.2
	12	4.5		9	7.8		11	GND
	13	4.5		10	0		12	8.8
	14	4.5		11	4.5		13	GND
IC153	1	0		12	4.5		14	4.7
	2	4.4		13	4.5		15	4.7
	3	4.4		14	4.5		16	8.9
	4	8.9		15	4.5	IC1401	1	4.4
	5	0		16	8.9		2	4.4
	6	4.5	IC261	1	4.5		3	4.4
	7	4.5		2	4.5		4	4.4
	8	4.5		3	4.5		6	4.4
	9	4.5		4	4.5		7	4.4
	10	4.5		5	4.5		8	4.4
	11	GND		6	4.2		9	4.4
	12	4.5		7	4.5		10	4.4
	13	4.5		8	4.5		11	8.9
	14	4.5		9	4.5		12	4
IC154	1	4.4		10	4.5		13	4.7
	2	4.4		11	4.5		15	4.8
	3	4.4		12	0		16	GND
	4	4.4		14	4.5		17	4
	5	4.4		15	4.5		18	4
	6	GND		16	4.5		19	2
	7	GND		17	4.5		20	2
	8	GND		18	0		21	2.2
	9	0.2		19	4.5		22	2.2
	10	0.2		20	4.5		23	4.4
	11	4.5		21	4.5		24	4.4
	12	4.5		22	4.5		25	4.4
	13	4.5		23	4.5		26	4.4
	14	4.5		24	4.5		27	4.4
	15	4.5		25	4.5		28	4.4
	16	8.9		26	4.5	IC1402	30	4.4
IC155	1	4.4		27	4.5		31	4.4
	2	4.4		28	4.5		32	5.2
	3	4.4		29	4.5		1	4.3
	4	8.9		30	0		2	4.4
	5	4.4		31	4.8		3	4.4
	6	7.3		32	4.7		4	GND
	7	0.9		33	GND		5	4.4
	8	0		34	4.5		6	4.5
	9	6.9		35	4.4		7	4.4
	10	4.5		36	4.6		8	8.9
	11	GND		37	GND	All Voltage are in V		

Pin numbers which are not described are not used.

UX BOARD TRANSISTOR VOLTAGE LIST

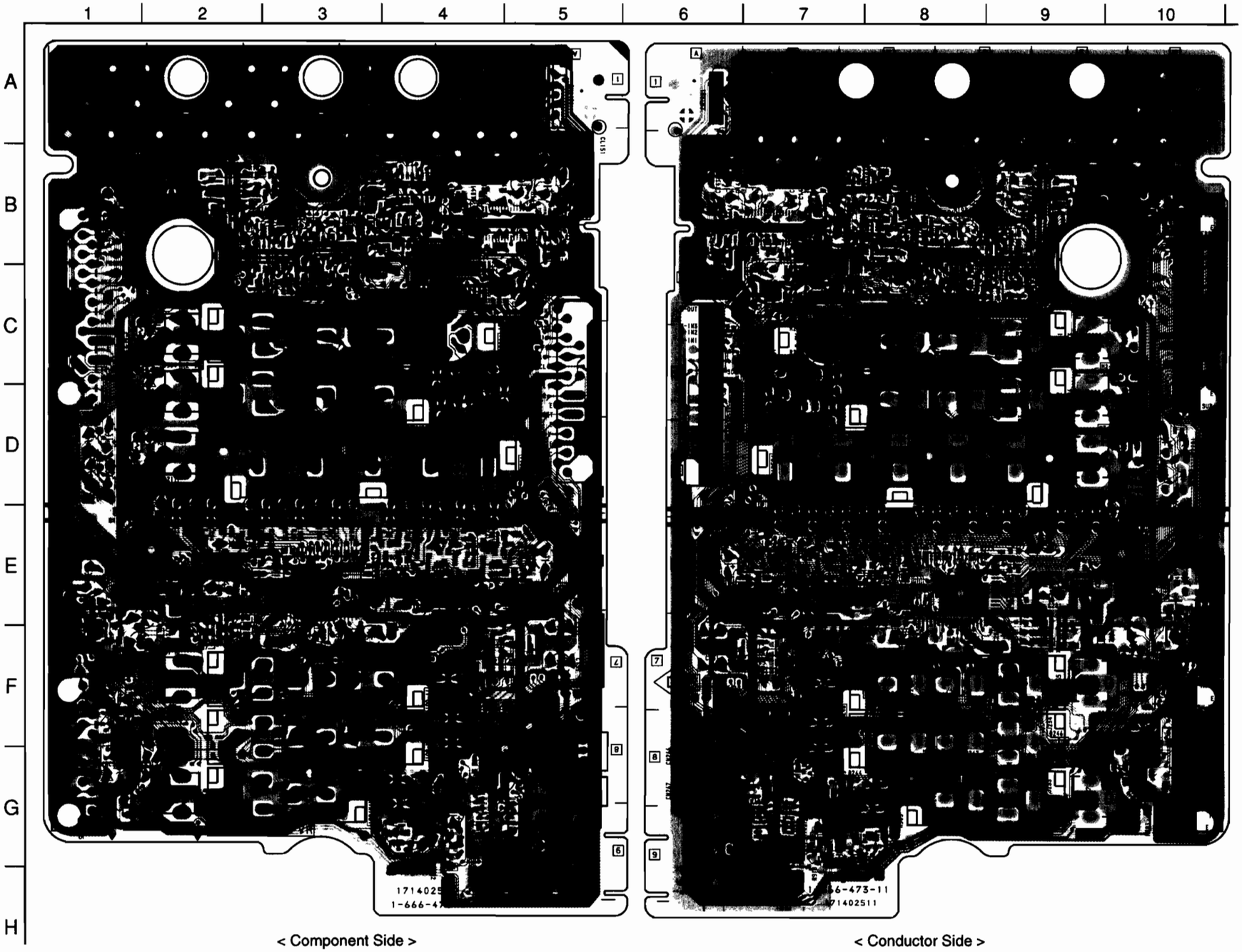
	B	C	E
Q200	2.8	7.8	2.2
Q203	2.7	7.8	2.2
Q205	7.8	4.1	8.4
Q206	7.8	4.0	8.4
Q208	14.1	8.9	3.5
Q209	4.0	8.9	3.5
Q210	2.9	7.8	2.2
Q211	7.8	4.2	8.5
Q212	4.2	8.9	3.5
Q231	-0.8	5.1	GND
Q233	-1.2	0	GND
Q234	-1.2	0	GND
Q235	0	0	GND
Q236	0	0	GND
Q237	4.4	GND	5.1
Q238	4.5	GND	5.2
Q239	4.6	GND	5.1
Q240	-0.3	5.1	GND
Q241	-0.3	5.1	GND
Q242	-0.3	5.1	GND
Q243	4.4	GND	5.1
Q244	4.4	GND	5.1
Q245	4.4	GND	5.1
Q246	0	5.1	GND
Q253	4.4	GND	5.1
Q254	4.5	GND	5.1
Q255	4.8	8.9	4.2
Q266	4.4	GND	5.0
Q267	0.3	GND	1.0
Q268	2.2	GND	2.9
Q1051	8.8	-8.7	8.6

All Voltage are in V



UX [AV SW, AUDIO CONTROL, SRS]

–UX BOARD –



< Component Side >

< Conductor Side >

UX BOARD

DIODE		*
D151	B-7	③
D152	B-7	③
D154	B-3	③
D201	E-7	–
D202	E-7	–
D203	E-7	–
D204	E-2,E-9	–
D205	E-2,E-10	–
D231	C-7	–
D232	D-4,D-7	–
D233	D-4,D-7	–
D234	C-4,C-7	–
D235	E-3,E-8	–
D236	E-3,E-8	–
D237	D-4,D-7	–
D238	E-3,E-9	–
D239	E-2,E-9	–
D245	F-7	③
D246	F-9	③
D247	E-1	③
D248	G-9	③
D249	E-1	③
D250	F-10	③
D261	F-3,F-8	–
D902	G-2	–
D910	C-2,C-10	–
D911	D-2	–
D912	D-2,D-10	–
D1051	G-7	③
D1052	G-6	③
D2201	D-1,D-10	–
D2202	D-1,D-10	–
D2203	D-1,D-10	–

IC		
IC151	B-3	
IC152	B-2	
IC153	B-3	
IC154	C-4	
IC155	B-4	
IC156	B-4	
IC157	C-4	
IC261	E-3	
IC1051	G-4	
IC1401	B-5	
IC1402	B-5	

TRANSISTOR		*
Q202	E-7	①
Q203	E-8	①
Q205	E-7	①
Q206	E-8	①
Q208	E-7	①
Q209	E-7	①
Q210	E-1	②
Q211	D-2	②
Q212	D-1	②
Q231	F-7	①
Q233	F-8	①
Q234	F-9	①
Q235	G-8	①
Q236	G-9	①
Q237	F-5	②
Q238	F-5	②
Q239	F-5	②
Q240	E-10	①
Q241	E-10	①
Q242	F-10	①
Q243	F-9	①
Q244	F-9	①
Q245	F-9	①
Q246	F-7	①
Q262	E-4	②
Q263	F-6	①
Q264	E-4	②
Q265	E-2	②
Q266	F-8	①
Q267	F-1	②
Q268	G-5	②
Q1051	G-6	①

NOTE:

- ▬ Pattern from the side which enables seeing
- ▬ : Pattern of the rear side.

C BOARD IC VOLTAGE LIST

IC1761	1	3 6
	2	9 1
	3	6 6
	4	GND
	5	6 6
	6	217 0
	7	150 0
	8	152 0
	9	149 0
IC1762	1	3 6
	2	9 10
	3	3 6
	4	GND
	5	5 9
	6	217 0
	7	156 0
	8	158 0
	9	155 0
IC1763	1	3 6
	2	9 1
	3	3 5
	4	GND
	5	3 8
	6	217
	7	152
	8	154
	9	151

All Voltage are in V
Pin numbers which are not not described are not used.

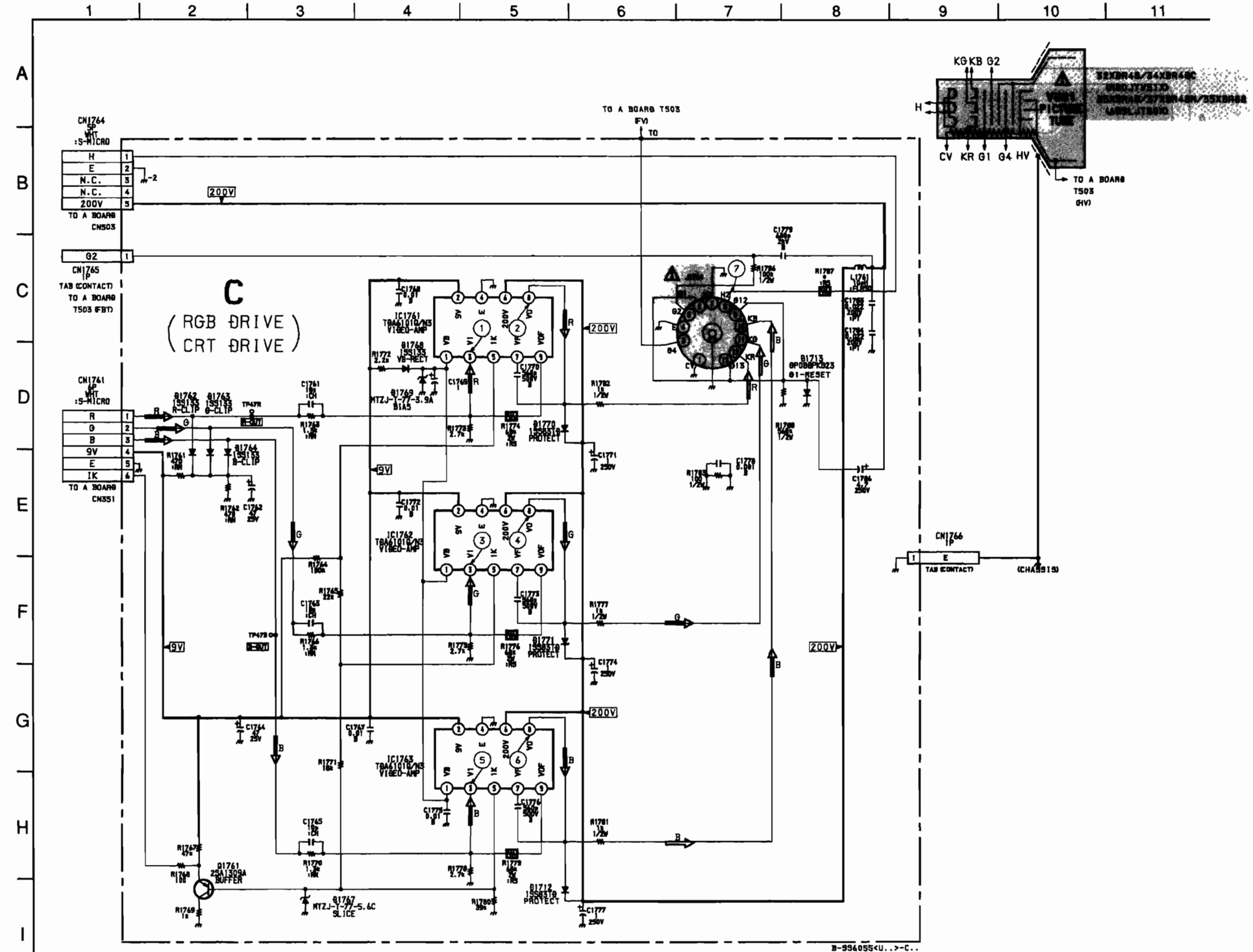
C BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q761	3 9	0 2	3 4

All Voltage are in V

C BOARD ＊MARK LIST

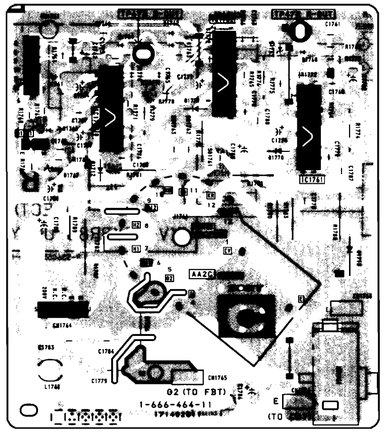
	KX-35XBR48/35XBR88/37XBR48M	KV-32XBR48/34XBR48C
R1787	2 7 2W RS	0 47 2W RS



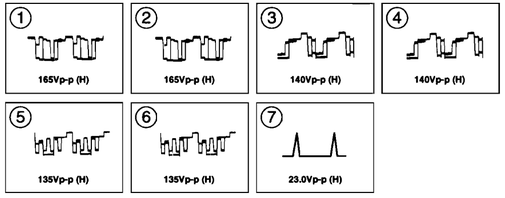
Schematic diagrams
C board ➡

C [RGB DRIVE, CRT DRIVE]

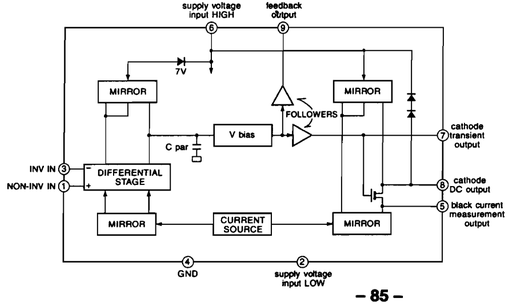
– C BOARD –



• C BOARD WAVEFORMS

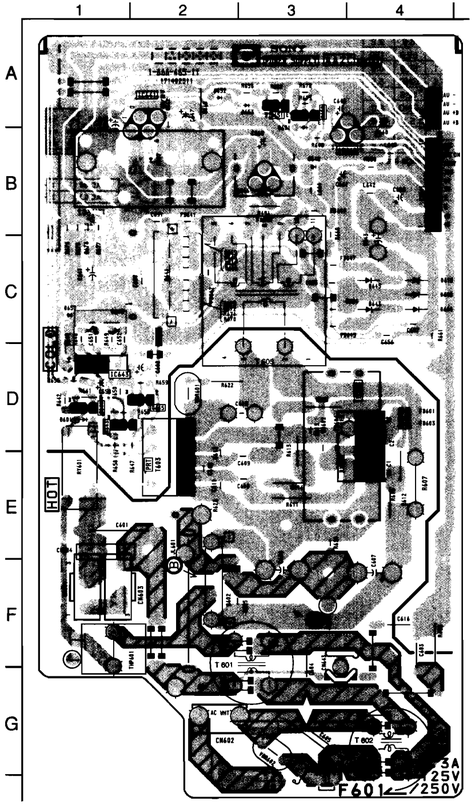


C BOARD : IC1761, 1762, 1763 TDA6101Q/N3



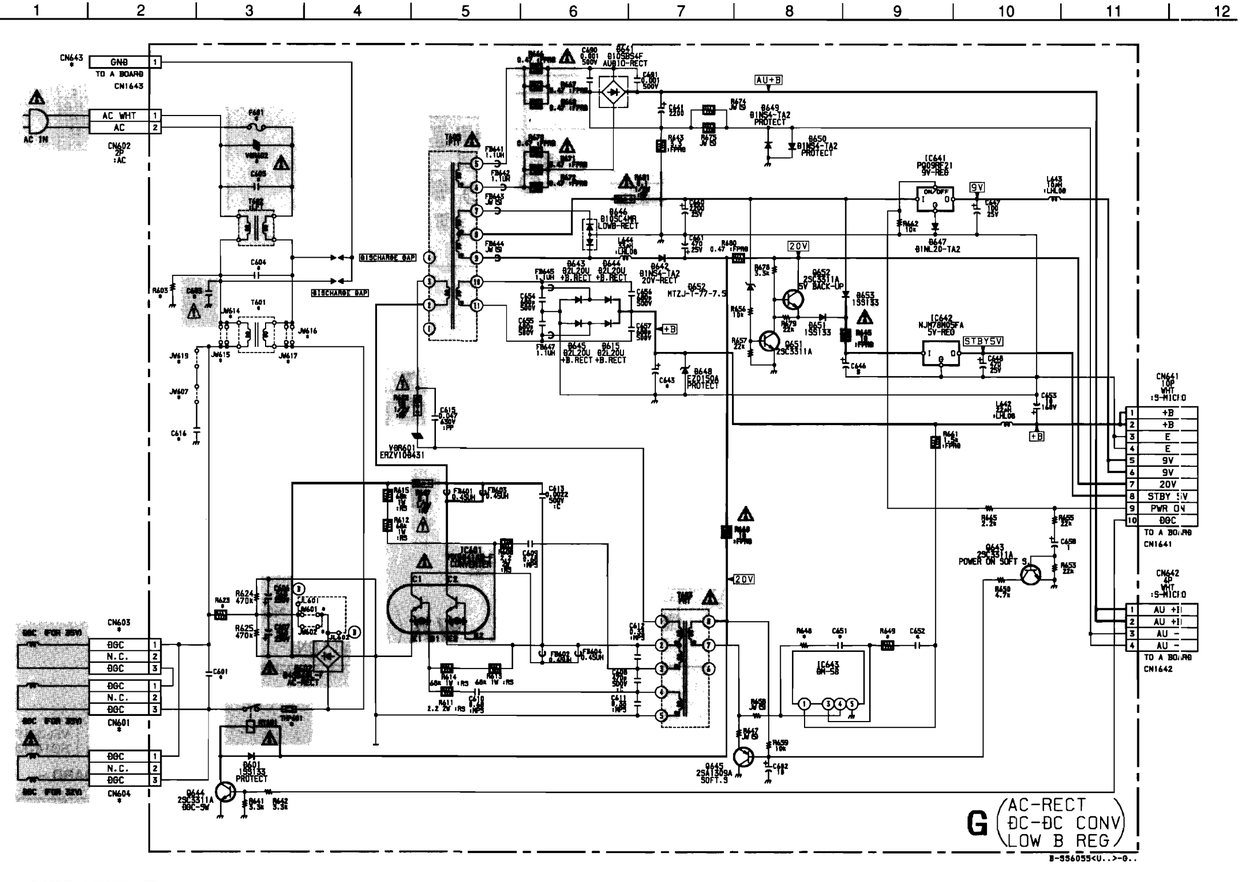
G [AC RECT, DC-DC CONV, LOW B REG]

– G BOARD –



G BOARD

		*
DIODE		
D601	D-1	–
D602	F-2	–
D615	C-4	–
D641	C-2	–
D642	B-3	–
D643	C-4	–
D644	C-4	–
D645	C-4	–
D646	B-3	–
D647	B-2	–
D648	C-4	–
D649	D-1	–
D650	C-1	–
D651	A-3	–
D652	A-2	–
D653	A-3	–
I C		
IC801	D-4	
IC641	A-2	
IC642	B-3	
IC643	D-1	
TRANSISTOR		*
Q643	D-1	–
Q644	D-1	–
Q645	D-2	–
Q651	A-3	–
Q652	A-3	–



G BOARD ＊MARK LIST

	KV-35XBR48/35XBR88/37XBR48M	KV-32XBR48	KV-34XBR48C
C601	0.22 250V	–	–
C605	0.47 125V	0.47 125V	0.47 300V
C643	220 160V	220 160V	33 160V : HR
C651	0.0022 : PT	0.0022 : PT	0.01 : PT
C652	0.0022 200V : PT	0.0022 200V : PT	0.001 200V : PT
CN601	3P WHT : MINI	–	–
CN603	3P WHT : MINI	–	–
CN604	–	1-508-765-21	1-508-765-21
F601	6.3A 125V	6.3A 125V	6.3A
JW601	5MM	5MM	–
JW602	5MM	5MM	–
R603	2.2M 1/2W 10% : RC	2.2M 1/2W 10% : RC	8.2M 1W
R623	0.82 20W : RB	0.82 20W : RB	3.3 20W : RB
R648	220K	220K	330K
R649	4.7K : FPRD	4.7K : FPRD	22K : FPRD
THP601	1-809-539-11	1-809-539-11	1-809-827-11
VDR602	ERZV10D271	ERZV10D471	ERZV10D271

– : Not mounted

G BOARD IC VOLTAGE LIST

IC601	B1	-235.0	IC642	I	9.6
	E1	GND		O	5.3
	C1	-23.4		G	GND
	B2	-78.7	IC643	1	138.0
	E2	-74.7		3	2.7
	C2	-77.1		4	16.1
IC641	I	11.2		5	GND
	O	9.9			
	G	GND			

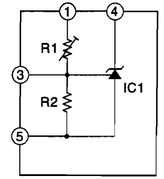
All Voltage are in V.
Pin numbers which are not described are not used.

G BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q643	0	18.1	GND
Q644	0.2	18.1	GND
Q645	18.1	GND	16.1
Q651	0.8	0	GND
Q652	0	18.0	0

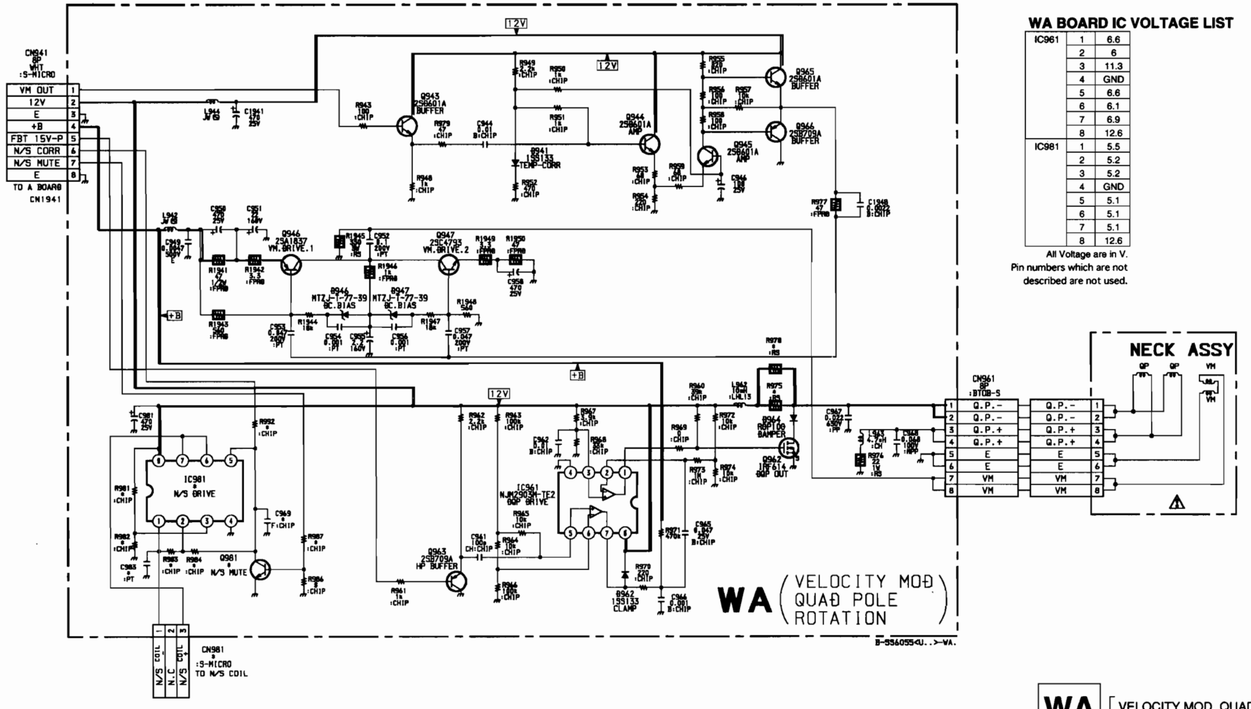
All Voltage are in V.

G BOARD : IC643 DM-58



Schematic diagrams
← G board

Schematic diagrams
WA FA FB board →



WA BOARD IC VOLTAGE LIST

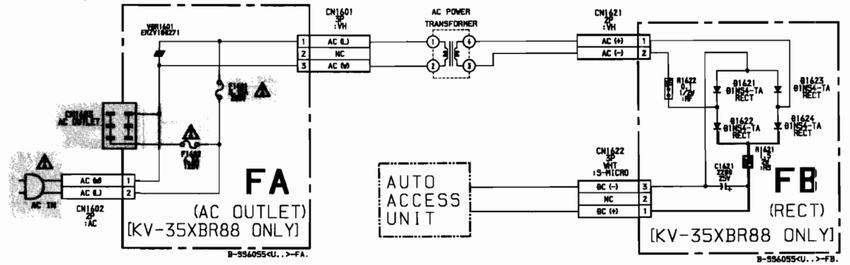
IC961	1	6.6
	2	6
	3	11.3
	4	GND
	5	6.6
	6	6.1
	7	6.9
	8	12.6
IC981	1	5.5
	2	5.2
	3	5.2
	4	GND
	5	5.1
	6	5.1
	7	5.1
	8	12.6

All Voltage are in V.
Pin numbers which are not described are not used.

WA BOARD TRANSISTOR VOLTAGE LIST

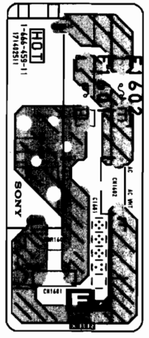
	B	C	E
Q943	3.2	12.6	2.5
Q944	2.8	12.6	2.2
Q945	2.8	8.6	2.2
Q946	138	69.9	139
Q947	1.1	69.9	0.6
Q963	4.8	GND	5.5
Q965	9.4	12.6	9.0
Q966	8.6	GND	9.0
Q981	0	5.1	GND
	S	D	G
Q962	GND	8.6	6.6

All Voltage are in V.



FA [AC OUTLET]

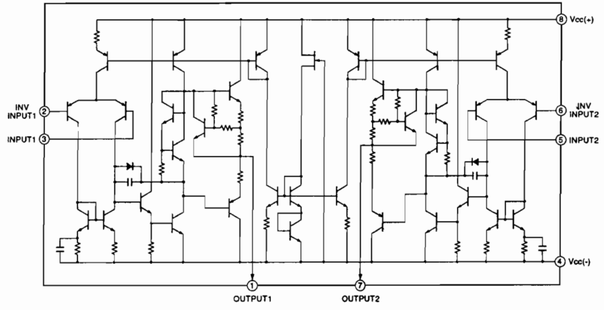
– FA BOARD –



FB [RECT] (KV-35XBR88 ONLY)

– FB BOARD –

WA BOARD : IC981 M5216P



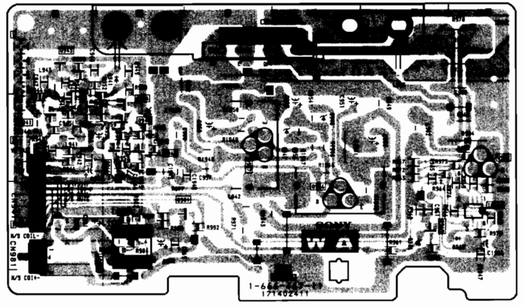
WA BOARD ＊MARK LIST

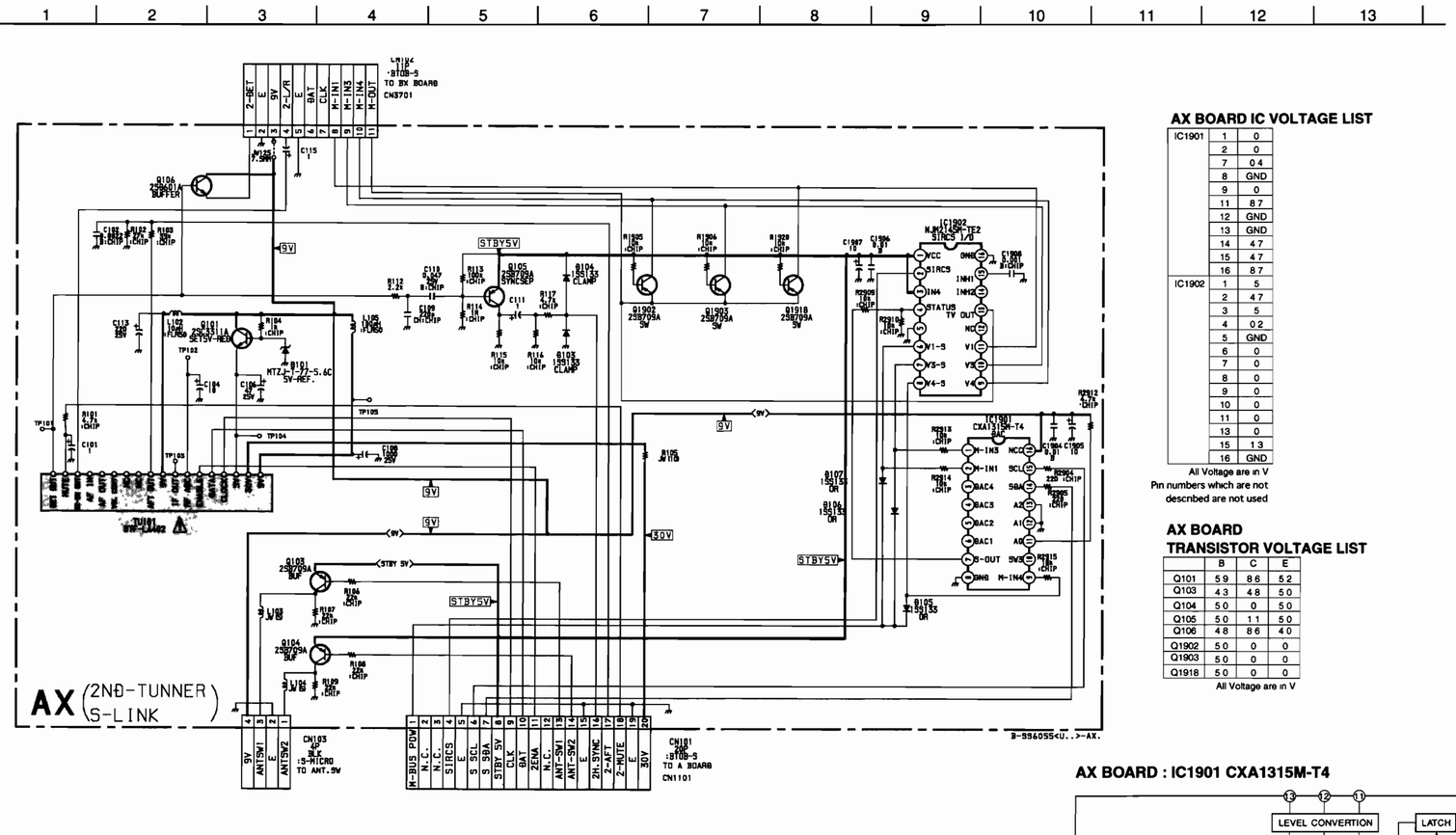
	KV-35XBR48/35XBR88/37XBR48M	KV-32XBR48/34XBR48C
C969	0.047 F : CHIP	–
C983	0.0022 F : PT	–
CN981	3P WHT S-MICRO	–
IC981	M5216P	–
Q981	2SD601A	–
R975	68 2W : RS	100 2W : RS
R978	68 2W : RS	100 2W : RS
R981	39K : CHIP	–
R982	22K : CHIP	–
R983	15K : CHIP	–
R984	6.8K : CHIP	–
R987	1K : CHIP	–
R992	–	10K : CHIP

– : Not mounted

WA [VELOCITY MOD, QUAD POLE, ROTATION]

– WA BOARD –





AX BOARD IC VOLTAGE LIST

IC1901	1	0
	2	0
	7	0.4
	8	GND
	9	0
	11	8.7
	12	GND
	13	GND
	14	4.7
	15	4.7
	16	8.7
IC1902	1	5
	2	4.7
	3	5
	4	0.2
	5	GND
	6	0
	7	0
	8	0
	9	0
	10	0
	11	0
	13	0
	15	1.3
	16	GND

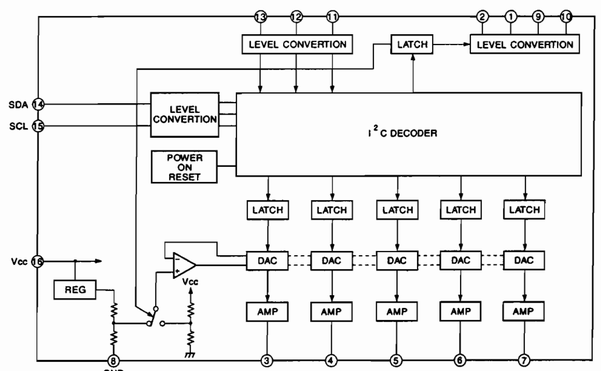
All Voltage are in V
Pin numbers which are not descnbed are not used

AX BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q101	5.9	8.6	5.2
Q103	4.3	4.8	5.0
Q104	5.0	0	5.0
Q105	5.0	1.1	5.0
Q106	4.8	8.6	4.0
Q1902	5.0	0	0
Q1903	5.0	0	0
Q1918	5.0	0	0

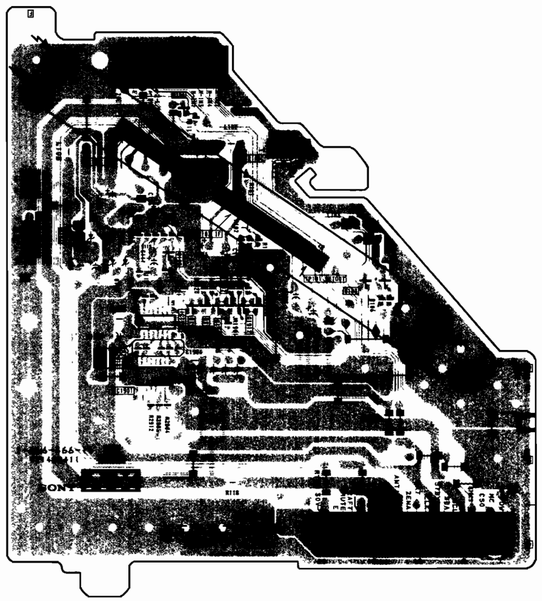
All Voltage are in V

AX BOARD : IC1901 CXA1315M-T4



AX [2ND TUNER, S-LINK]

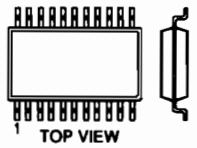
– AX BOARD –



Schematic diagrams
← AX board

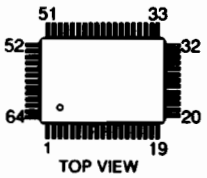
5-4. SEMICONDUCTORS

BU4053BCF-T2
CXA1315M
MC14052BF
NJM2145M-TE2

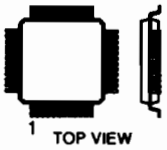


16 pin SOP

CXA1845Q

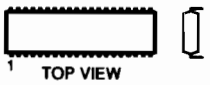


CXA2019Q

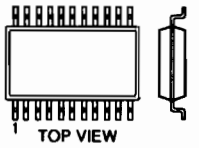


40 pin

CXA2025AS

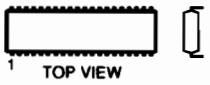


CXA2039M-T6



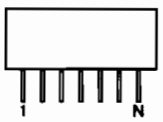
24 pin SOP

CXP85856A-001S



66 pin DIP

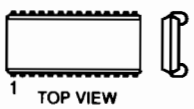
DM-58



MARKING SIDE VIEW

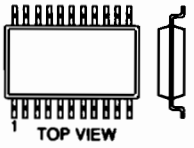
- pin 1 ~ N
- Mt (one side, both side)

HM538253BJ-7Z



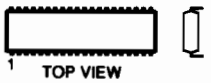
40 pin SOJ

MN47V76ST1
MN47V77ST1



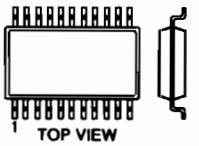
28 pin SOP

NJM2902M



14 pin DIP

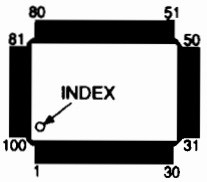
NJM2903M
NJM2904M
ST24C02FM6TR
µPC4558G2
X24C04SB



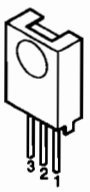
8 pin SOP

NJM78M05FA
PQ09RF21
TA7805S

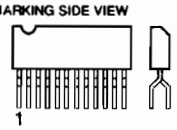
SAB9076AH
µPD6488GF-33A



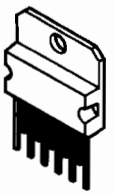
SBX1981-51



TDA6101Q/N3

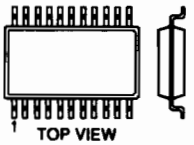


TDA7262



TDA8172

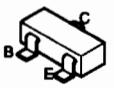
µPC1862GS-E2



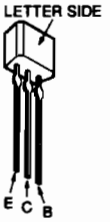
36 pin

IRF614

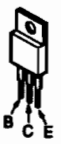
2SA1037K-T146-R
2SA1162-G
2SA1330-06
2SC1623-L5L6
2SD601A-Q



2SA1175-HFE
2SA933AS-QRT
2SC2785-HFE

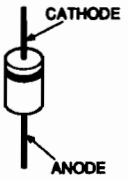


2SA1837
2SC4159-E
2SC4793
2SD2012

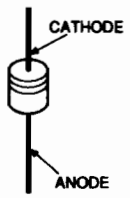


2SC3209LK

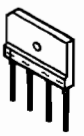
D1NL20
D2L20U
EL1Z
EGP30D
ERD29-08J
EZ0150AV1
GP08D
MTZJ-T-9110
MTZJ-33A
1SS83



D1NS4
MTZJ-7.5B
MTZJ-T-77-13A
RD10ESB2
RD33ESB1
RD3.9ES-B1
RD5.6ESB2
RD5.6ESB3
1SS119-25
1SS133T-77

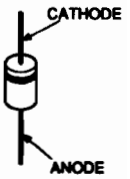


D10SBS4F
D6SB60L

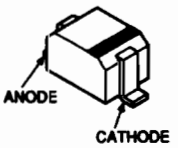


D10SC4MR

EGP20G
ERC06-15S



MA111
RD3.3SB
1SS355



SECTION 6

EXPLODED VIEWS

NOTE:

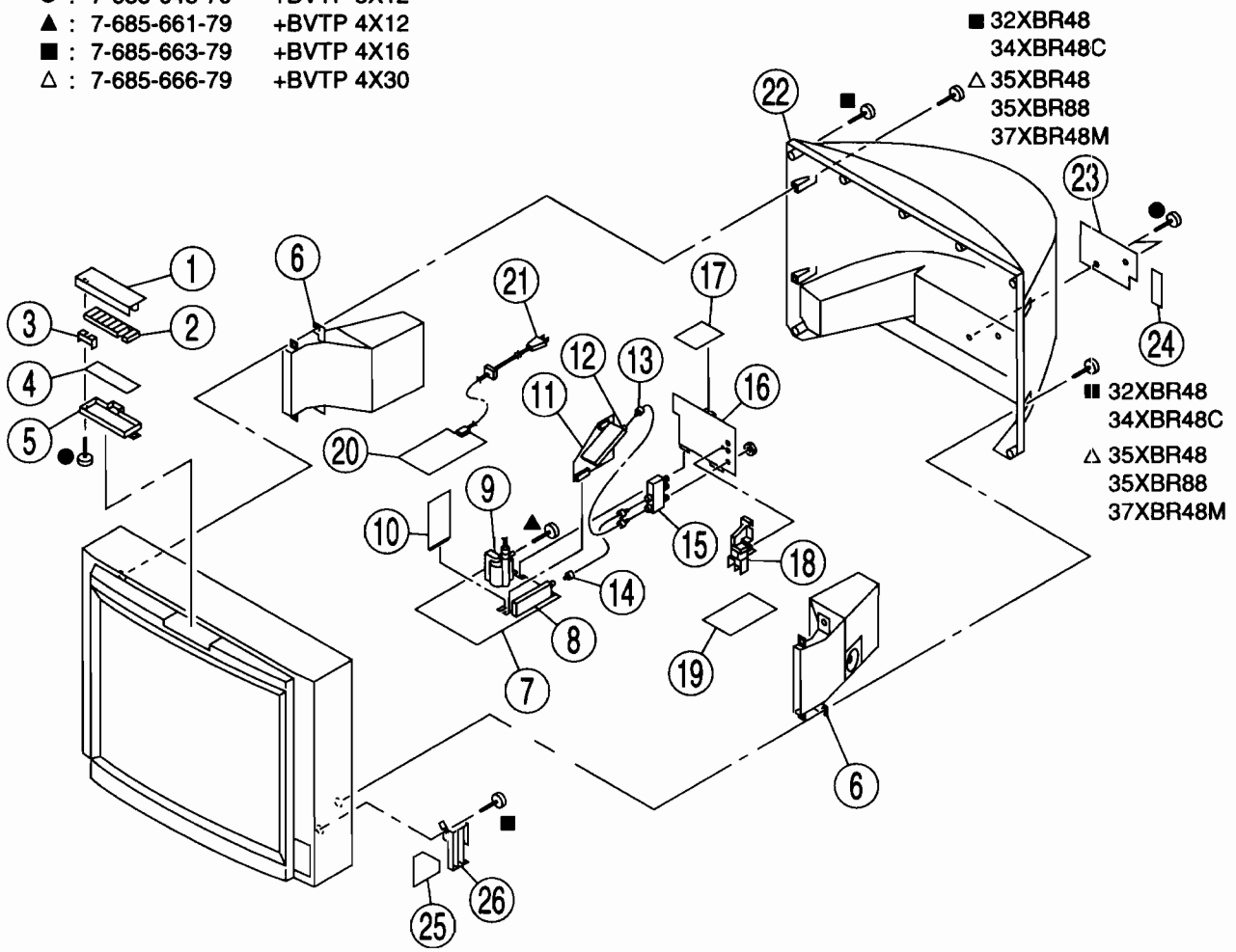
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety
Replace only with part number specified

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite
Ne les remplacer que par une piece portant le numero specifie

6-1. CHASSIS

● : 7-685-648-79 +BVTP 3X12
▲ : 7-685-661-79 +BVTP 4X12
■ : 7-685-663-79 +BVTP 4X16
△ : 7-685-666-79 +BVTP 4X30

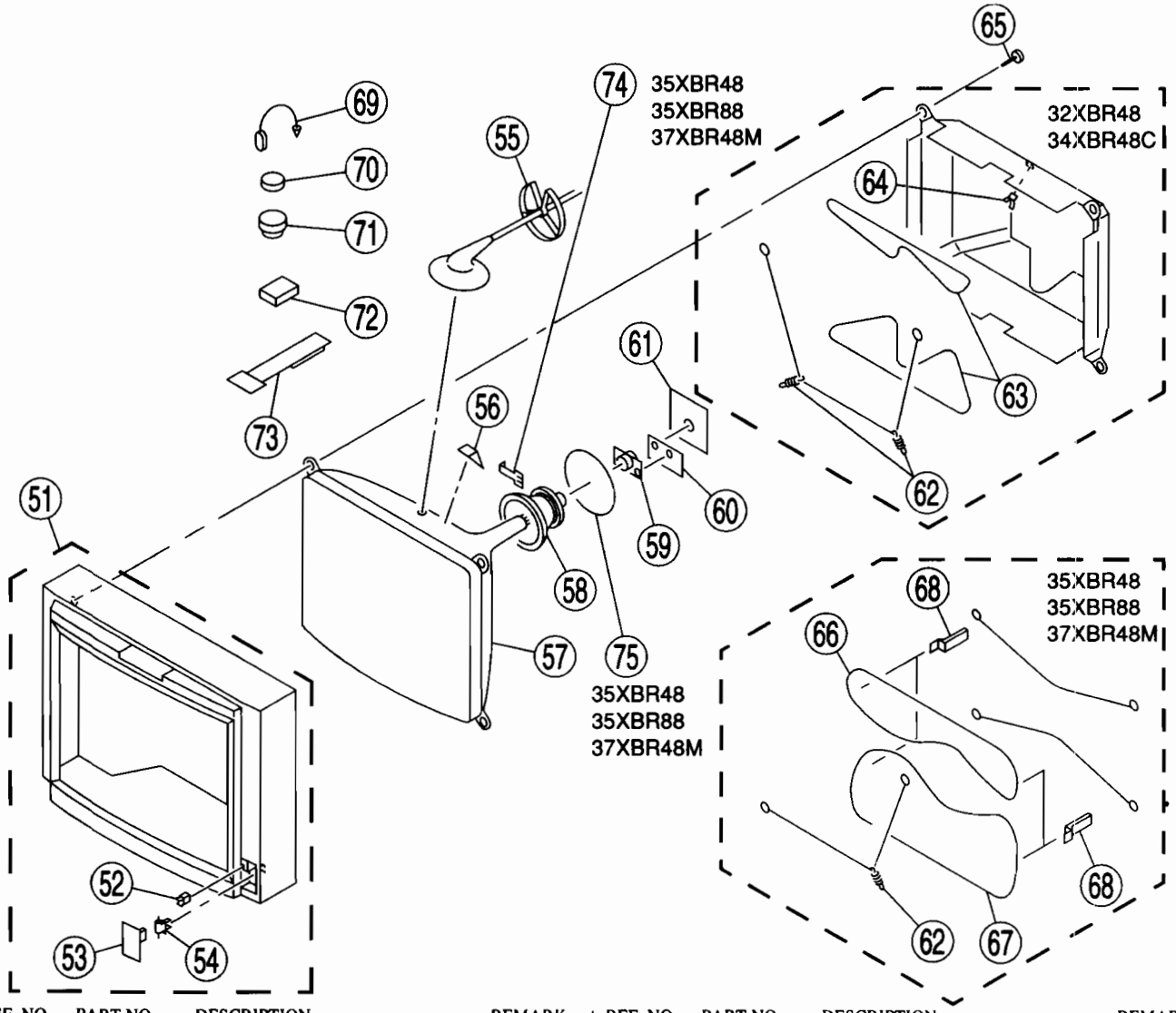


REF NO	PART NO	DESCRIPTION	REMARK
1	4-059-505-01	PANEL, CONTROL	
2	4-059-506-01	BUTTON, MULTI	
3	* 4-059-512-01	GUIDE, LED	
4	* A-1372-350-A	HX BOARD, COMPLETE	
5	* 4-059-504-01	BRACKET, HX	
6	1-505-684-11	SPEAKER UNIT, BOX TYPE (KV-35XBR48/35XBR88/37XBR48M)	
	1-505-721-11	BOX TYPE, SPEAKER UNIT (KV-32XBR48/34XBR48C)	
7	* A-1298-140-A	A BOARD, COMPLETE (KV-35XBR48/35XBR88/37XBR48M)	
	* A-1298-141-A	A BOARD, COMPLETE (KV-32XBR48/34XBR48C)	
8	⚠ 8-598-340-20	TUNER, FSS BTF-WA404	
9	⚠ 1-453-244-11	TRANSFORMER ASSY, FLYBACK (NX-2612//X4C) (KV-32XBR48/34XBR48C)	
	⚠ X-4034-797-1	TRANSFORMER ASSY, FLYBACK (NX-3005//J1C) (KV-35XBR48/35XBR88/37XBR48M)	
10	* A-1195-121-A	PX BOARD, COMPLETE	
11	* A-1298-139-A	AX BOARD, COMPLETE	
12	⚠ 8-598-339-20	TUNER, FSS BTF-LA402	
13	* 1-557-056-31	CABLE, P-P	
14	* 1-556-945-21	CABLE, P-P	
15	8-598-414-00	ANTENNA SWITCH AS-2F	
16	* A-1394-860-A	UX BOARD, COMPLETE	
17	* A-1135-902-A	BX BOARD, COMPLETE	
18	* 4-052-905-01	V5/6 BRACKET	
19	* A-1380-540-A	K BOARD, COMPLETE	
20	* A-1316-323-A	G BOARD, COMPLETE (KV-35XBR48/35XBR88/37XBR48M)	
	* A-1316-324-A	G BOARD, COMPLETE (KV-32XBR48)	
	* A-1316-331-A	G BOARD, COMPLETE (KV-34XBR48C)	
21	⚠ 1-751-059-11	CORD, POWER (WITH CONNECTOR) 10A/125V (except KV-34XBR48C)	
	⚠ 1-769-796-41	COARD, POWER (WITH CONNECTOR) (KV-34XBR48C)	
22	4-059-495-01	COVER, REAR (KV-32XBR48/34XBR48C)	
	4-059-503-01	COVER, REAR (KV-35XBR48/35XBR88/37XBR48M)	
23	4-059-499-01	LABEL, TERMINAL	
24	4-059-500-01	LABEL, ANTENNA	
25	* A-1372-351-A	HF BOARD, COMPLETE	
26	* 4-059-501-01	BRACKET, HF (KV-35XBR48/35XBR88/37XBR48M)	
	* 4-059-920-01	BRACKET, HF (KV-32XBR48/34XBR48C)	

The components identified by shading and mark ⚠ are critical for safety
Replace only with part number specified

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite
Ne les remplacer que par une piece portant le numero specifie

6-2. PICTURE TUBE



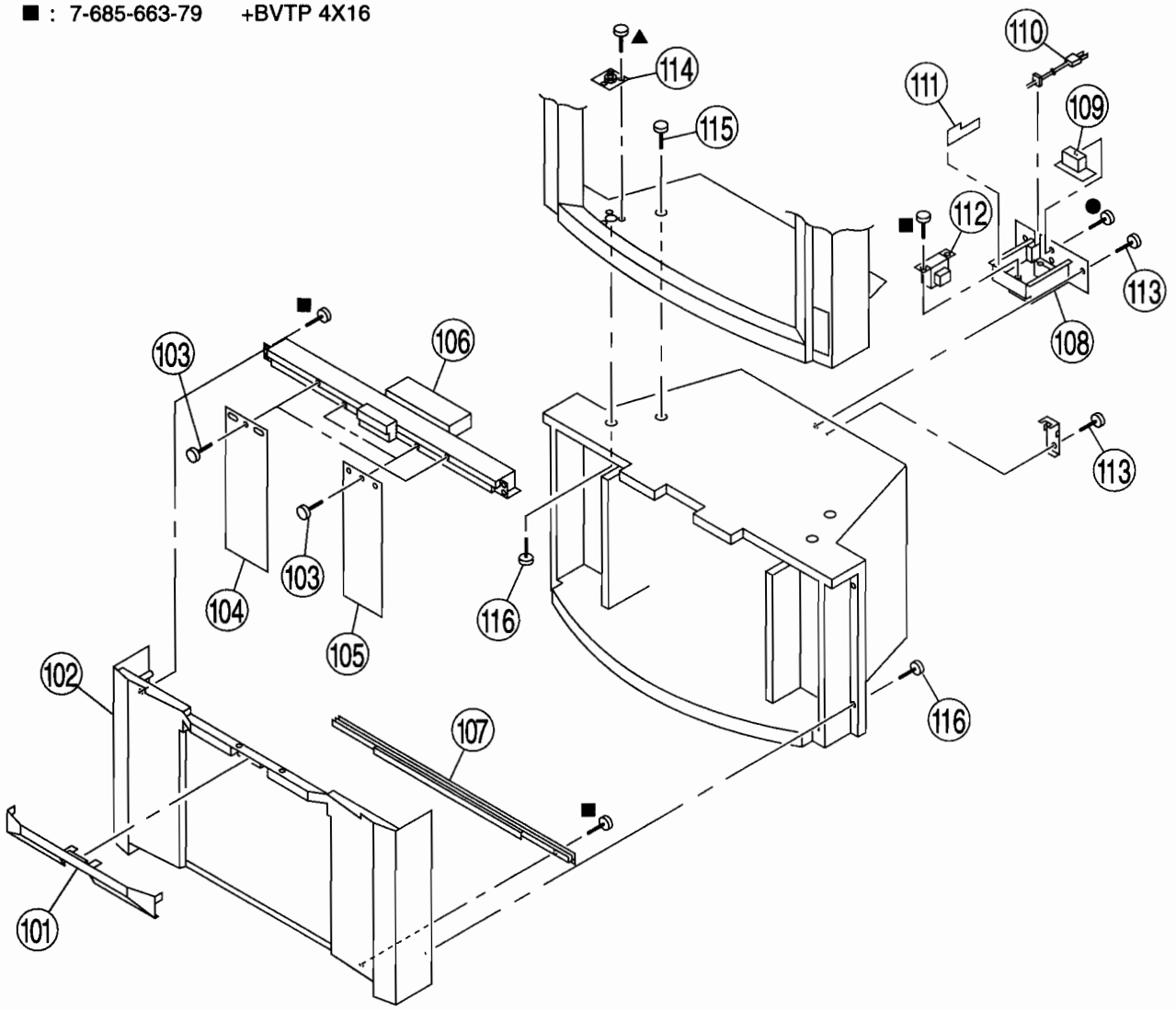
REF NO	PART NO	DESCRIPTION	REMARK
51	X-4034-634-1	BEZNET ASSY (KV-32XBR48/34XBR48C)	52-54
	X-4034-635-1	BEZNET ASSY (KV-35XBR48/35XBR88/37XBR48M)	52-54
52	4-392-036-01	CATCHER, PUSH	
53	4-059-497-01	DOOR, CONTROL	
54	4-045-250-31	DAMPER	
55	3-704-372-31	HOLDER, HV CABLE	
56	4-053-005-01	SPACER, DY (KV-32XBR48/34XBR48C)	
	4-053-093-01	SPACER DY (KV-35XBR48/35XBR88/37XBR48M)	
57	⚠ 8-733-745-05	PICTURE TUBE 34FXD2(SDP) (XBR) (M80JYV51X) (KV-32XBR48)	
	⚠ 8-733-760-05	PICTURE TUBE 37GX (A89LJT80X) (KV-35XBR48/35XBR88/37XBR48M)	
	⚠ 8-735-746-05	PICTURE TUBE 34FXD2 (SDP) (FOR XBR/10UT) (M80JYV51X) (KV-34XBR48C)	
58	⚠ 8-451-480-11	DEFLECTION YOKE Y37GXA-X (KV-35XBR48/35XBR88/37XBR48M)	
	⚠ 8-451-482-21	DEFLECTION YOKE Y34FXA2-X (KV-32XBR48/34XBR48C)	
59	⚠ 8-453-007-21	NA324-M2	
60	* A-1372-348-A	WA BOARD, COMPLETE (KV-35XBR48/35XBR88/37XBR48M)	
	* A-1372-352-A	WA BOARD, COMPLETE (KV-32XBR48/34XBR48C)	
61	* A-1331-692-A	C BOARD, COMPLETE (KV-35XBR48/35XBR88/37XBR48M)	
	* A-1331-694-A	C BOARD, COMPLETE (KV-32XBR48/34XBR48C)	
62	4-036-329-01	SPRING (B), TENSION	
63	⚠ 1-402-952-12	COIL, DEMAGNETIZATION (KV-32XBR48)	
	⚠ 1-411-474-11	COIL, DEMAGNETIZATION (KV-34XBR48C)	
64	* 4-371-629-01	STOPPER, WIRE (KV-32XBR48/34XBR48C)	
65	4-041-268-01	SCREW (7), TAPPING (KV-32XBR48/34XBR48C)	
	4-046-765-01	SCREW, TAPPING (KV-35XBR48/35XBR88/37XBR48M)	
66	⚠ 1-411-881-12	COIL, DEMAGNETIC (KV-35XBR48/35XBR88/37XBR48M)	
67	⚠ 1-411-882-12	COIL, DEMAGNETIC (KV-35XBR48/35XBR88/37XBR48M)	
68	* 4-052-900-01	HOLDER, DGC (KV-35XBR48/35XBR88/37XBR48M)	
69	4-308-870-00	CLIP, LEAD WIRE	
70	1-452-032-00	MAGNET, DISK , 10mmø	
71	1-452-094-00	MAGNET, ROTATABLE DISK , 15mmø	
72	1-452-885-11	MAGNET, LANDING (KV-32XBR48/34XBR48C)	
73	4-051-737-21	PIECE A(100), CONV CORRECT	
74	4-034-272-51	REVIISED BOARD, TLV (KV-35XBR48/35XBR88/37XBR48M)	
75	1-452-724-11	COIL, NA ROTATION (KV-35XBR48/35XBR88/37XBR48M)	

The componants identified by shading and mark ⚠ are critical for safety
Replace only with part number specified

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite
Ne les remplacer que par une piece portant le numero specifie

6-3. CABINET BASE (KV-35XBR88)

● : 7-685-648-79 +BVTP 3X12
▲ : 7-685-661-79 +BVTP 4X12
■ : 7-685-663-79 +BVTP 4X16



REF. NO	PART NO	DESCRIPTION	REMARK
101	4-059-614-01	CONTROL PANEL, STAND	
102	4-059-613-01	PANEL, FRONT	
103	4-060-204-01	SCREW, HANGER	
104	4-060-203-01	PLATE, DOOR (OUT)	
105	4-060-202-01	PLATE, DOOR (IN)	
106	1-475-319-11	DOOR UNIT, AUTO	
107	4-060-197-01	RAIL, GUIDE	
108	4-059-615-01	CASE, AC OUTLET	
109	* A-1241-293-A	FA BOARD, COMPLETE	

REF NO	PART NO.	DESCRIPTION	REMARK
110	⚠ 1-751-059-11	CORD, POWER (WITH CONNECTOR)	10A/125V
111	* A-1241-294-A	FB BOARD, COMPLETE	
112	1-431-520-11	TRANSFORMER, POWER	
113	4-041-164-11	SCREW (4X20), TAPPING	
114	4-060-201-01	NUT, CONSOLE CLAMP	
115	4-046-765-01	SCREW , TAPPING	
116	4-052-748-11	BOLT, +HX HEAD WITH WASHER	

SECTION 7
ELECTRICAL PARTS LIST

BX

NOTE:

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark ⚠ are critical for safety. Replace only with part number specified

- The components identified by ⋈ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

- CAPACITORS
  PF : μμ F
- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

REF. NO.	PART NO.	DESCRIPTION			REMARK
	* A-1135-902-A	BX BOARD, COMPLETE **********			
		<CAPACITOR>			
C3701	1-104-664-11	ELECT	47MF	20%	25V
C3703	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C3704	1-104-664-11	ELECT	47MF	20%	25V
C3706	1-104-664-11	ELECT	47MF	20%	25V
C3707	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C3708	1-104-664-11	ELECT	47MF	20%	25V
C3709	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C3710	1-104-664-11	ELECT	47MF	20%	25V
C3711	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3712	1-126-961-11	ELECT	2 2MF	20%	50V
C3713	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C3722	1-126-959-11	ELECT	0 47MF	20%	50V
C3723	1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C3724	1-164-232-11	CERAMIC CHIP	0 01MF	10%	50V
C3725	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3727	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3728	1-163-037-11	CERAMIC CHIP	0 022MF	10%	50V
C3729	1-126-963-11	ELECT	4 7MF	20%	50V
C3730	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C3731	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C3732	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C3733	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3734	1-126-964-11	ELECT	10MF	20%	50V
C3735	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3736	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C3737	1-126-964-11	ELECT	10MF	20%	50V
C3739	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C3741	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C3742	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3743	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C3744	1-163-011-11	CERAMIC CHIP	0 0015MF	10%	50V
C3745	1-126-963-11	ELECT	4 7MF	20%	50V
C3746	1-164-232-11	CERAMIC CHIP	0 01MF	10%	50V
C3747	1-164-232-11	CERAMIC CHIP	0 01MF	10%	50V
C3755	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C3756	1-104-664-11	ELECT	47MF	20%	25V
C3758	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C3759	1-104-664-11	ELECT	47MF	20%	25V
C3763	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C3764	1-164-232-11	CERAMIC CHIP	0 01MF	10%	50V
C3766	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3768	1-126-964-11	ELECT	10MF	20%	50V
C3770	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C3771	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3772	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C3773	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C3774	1-126-964-11	ELECT	10MF	20%	50V
C3775	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3776	1-126-961-11	ELECT	2.2MF	20%	50V
C3777	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C3778	1-104-664-11	ELECT	47MF	20%	25V
C3779	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3780	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3781	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3782	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C3784	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3785	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3786	1-126-964-11	ELECT	10MF	20%	50V
C3787	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3788	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3789	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3790	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3791	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3792	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3827	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C3828	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3829	1-126-964-11	ELECT	10MF	20%	50V
C3830	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3831	1-126-964-11	ELECT	10MF	20%	50V
C3832	1-126-964-11	ELECT	10MF	20%	50V
C3833	1-126-964-11	ELECT	10MF	20%	50V
C3834	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3835	1-126-960-11	ELECT	1MF	20%	50V
C3836	1-128-551-11	ELECT	22MF	20%	25V
		<CONNECTOR>			
CN3701	1-573-978-21	CONNECTOR, BOARD TO BOARD 11P			
CN3702	1-573-297-21	CONNECTOR, BOARD TO BOARD 18P			
		<DIODE>			
D3704	8-719-404-49	DIODE MA111			
D3705	8-719-404-49	DIODE MA111			
D3706	8-719-404-49	DIODE MA111			
D3707	8-719-404-49	DIODE MA111			
D3708	8-719-404-49	DIODE MA111			
		<FERRITE BEAD>			
FB3701	1-412-911-11	INDUCTOR, FERRITE BEAD			
FB3702	1-216-295-91	CONDUCTOR, CHIP			
FB3703	1-216-295-91	CONDUCTOR, CHIP			
FB3706	1-216-295-91	CONDUCTOR, CHIP			
FB3707	1-216-295-91	CONDUCTOR, CHIP			
FB3708	1-216-295-91	CONDUCTOR, CHIP			
		<FILTER>			
FL3702	1-239-847-11	FILTER, LOW PASS			
FL3704	1-239-847-11	FILTER, LOW PASS			
FL3705	1-239-847-11	FILTER, LOW PASS			
FL3706	1-236-101-11	ENCAPSULATED COMPONENT			
FL3707	1-236-101-11	ENCAPSULATED COMPONENT			

BX

REF. NO.	PART NO.	DESCRIPTION	REMARK
		<IC>	
IC3702	8-759-701-56	IC NJM78M05FA	
IC3703	8-759-445-59	IC BA033T	
IC3705	8-759-296-53	IC uPC1862GS-E2	
IC3707	8-759-444-12	IC uPD6488GF-3BA	
IC3708	8-759-429-95	IC MN47V76ST1	
IC3709	8-759-422-80	IC MN47V77ST1	
		<CHIP CONDUCTOR>	
JR3710	1-216-295-91	CONDUCTOR, CHIP	
JR3712	1-216-295-91	CONDUCTOR, CHIP	
JR3714	1-216-295-91	CONDUCTOR, CHIP	
		<COIL>	
L3701	1-410-470-11	INDUCTOR 10UH	
L3702	1-410-470-11	INDUCTOR 10UH	
L3706	1-410-470-11	INDUCTOR 10UH	
L3708	1-410-470-11	INDUCTOR 10UH	
L3709	1-410-466-41	INDUCTOR 4 7UH	
L3714	1-410-470-11	INDUCTOR 10UH	
		<TRANSISTOR>	
Q3701	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q3702	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q3703	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3707	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3708	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q3709	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q3719	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3724	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3725	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q3728	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q3729	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q3731	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3732	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q3733	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3734	8-729-422-27	TRANSISTOR 2SD601A-Q	
		<RESISTOR>	
R3701	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R3702	1-216-091-00	METAL GLAZE 56K 5% 1/10W	
R3703	1-216-057-00	METAL GLAZE 2 2K 5% 1/10W	
R3704	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R3705	1-216-057-00	METAL GLAZE 2 2K 5% 1/10W	
R3706	1-208-750-11	METAL GLAZE 47 0 50% 1/10W	
R3707	1-208-762-11	METAL GLAZE 150 0.50% 1/10W	
R3708	1-216-043-91	METAL GLAZE 560 5% 1/10W	
R3709	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R3710	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R3711	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R3717	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R3719	1-208-770-11	METAL GLAZE 330 0 50% 1/10W	
R3722	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R3746	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R3747	1-216-121-91	METAL GLAZE 1M 5% 1/10W	
R3748	1-216-065-00	METAL GLAZE 4 7K 5% 1/10W	
R3749	1-208-775-11	METAL GLAZE 510 0.50% 1/10W	
R3750	1-208-758-11	METAL GLAZE 100 0 50% 1/10W	
R3751	1-216-009-00	METAL GLAZE 22 5% 1/10W	
R3752	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R3753	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R3754	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R3755	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R3757	1-216-033-00	METAL GLAZE 220 5% 1/10W	

REF NO	PART NO	DESCRIPTION	REMARK
R3759	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R3760	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R3761	1-216-057-00	METAL GLAZE 2 2K 5% 1/10W	
R3762	1-216-035-00	METAL GLAZE 270 5% 1/10W	
R3763	1-216-059-00	METAL GLAZE 2 7K 5% 1/10W	
R3764	1-216-071-00	METAL GLAZE 8 2K 5% 1/10W	
R3771	1-216-029-00	METAL GLAZE 150 5% 1/10W	
R3772	1-208-784-11	METAL GLAZE 1 2K 0.50% 1/10W	
R3773	1-208-806-11	METAL GLAZE 10K 0.50% 1/10W	
R3774	1-208-814-11	METAL GLAZE 22K 0.50% 1/10W	
R3775	1-216-029-00	METAL GLAZE 150 5% 1/10W	
R3776	1-208-788-11	METAL GLAZE 1 8K 0 50% 1/10W	
R3777	1-208-814-11	METAL GLAZE 22K 0.50% 1/10W	
R3778	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R3782	1-216-295-91	CONDUCTOR, CHIP	
R3783	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R3784	1-216-001-00	METAL GLAZE 10 5% 1/10W	
R3788	1-216-043-91	METAL GLAZE 560 5% 1/10W	
R3789	1-216-071-00	METAL GLAZE 8 2K 5% 1/10W	
R3790	1-216-091-00	METAL GLAZE 56K 5% 1/10W	
R3791	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R3792	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R3793	1-208-774-11	METAL GLAZE 470 0 50% 1/10W	
R3794	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R3795	1-208-782-11	METAL GLAZE 1K 0.50% 1/10W	
R3806	1-216-001-00	METAL GLAZE 10 5% 1/10W	
R3810	1-216-043-91	METAL GLAZE 560 5% 1/10W	
R3811	1-216-071-00	METAL GLAZE 8 2K 5% 1/10W	
R3812	1-216-091-00	METAL GLAZE 56K 5% 1/10W	
R3813	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R3814	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R3815	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R3816	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R3817	1-216-051-00	METAL GLAZE 1 2K 5% 1/10W	
R3858	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R3859	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R3880	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R3881	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R3884	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R3885	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R3886	1-216-105-91	METAL GLAZE 220K 5% 1/10W	
R3887	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R3888	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R3889	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R3890	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R3891	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R3892	1-216-295-91	CONDUCTOR, CHIP	
R3893	1-216-295-91	CONDUCTOR, CHIP	
R3894	1-216-295-91	CONDUCTOR, CHIP	
R3895	1-216-295-91	CONDUCTOR, CHIP	
R3896	1-216-017-91	METAL GLAZE 47 5% 1/10W	
R3898	1-216-017-91	METAL GLAZE 47 5% 1/10W	
R3900	1-216-295-91	CONDUCTOR, CHIP	
R3901	1-216-295-91	CONDUCTOR, CHIP	
R3902	1-216-295-91	CONDUCTOR, CHIP	
R3903	1-216-295-91	CONDUCTOR, CHIP	
R3904	1-216-295-91	CONDUCTOR, CHIP	
		<CRYSTAL>	
X3701	1-527-722-00	VIBRATOR, CRYSTAL	
X3702	1-579-583-11	VIBRATOR, CERAMIC	

****

PX

REF. NO	PART NO	DESCRIPTION			REMARK
	* A-1195-121-A	PX BOARD, COMPLETE **********			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C3301	1-104-664-11	ELECT	47MF	20%	25V
C3302	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C3303	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C3304	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C3306	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3307	1-126-960-11	ELECT	1MF	20%	50V
C3308	1-126-935-11	ELECT	470MF	20%	16V
C3310	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C3311	1-126-963-11	ELECT	4.7MF	20%	50V
C3312	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3314	1-164-346-11	CERAMIC CHIP	1MF		16V
C3315	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3316	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3317	1-126-959-11	ELECT	0 47MF	20%	50V
C3318	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C3319	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3320	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3321	1-107-909-11	ELECT	47MF	20%	16V
C3322	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3323	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C3324	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C3325	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3326	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3327	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3329	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C3330	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3331	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3332	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3333	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3334	1-164-004-11	CERAMIC CHIP	0 1MF	10%	25V
C3335	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C3336	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C3339	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C3340	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3342	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3343	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3344	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C3345	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3346	1-164-004-11	CERAMIC CHIP	0 1MF	10%	25V
C3347	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3348	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C3349	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C3351	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3352	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3353	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3354	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3355	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C3356	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3357	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C3358	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C3359	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3360	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3364	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3365	1-104-664-11	ELECT	47MF	20%	25V
C3366	1-164-004-11	CERAMIC CHIP	0 1MF	10%	25V
C3367	1-104-664-11	ELECT	47MF	20%	25V
C3386	1-104-664-11	ELECT	47MF	20%	25V
C3387	1-163-809-11	CERAMIC CHIP	0 047MF	10%	25V
C3388	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C3389	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C3391	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3392	1-126-960-11	ELECT	1MF	20%	50V
C3393	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3394	1-126-959-11	ELECT	0.47MF	20%	50V
C3395	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C3396	1-126-963-11	ELECT	4 7MF	20%	50V
C3397	1-126-935-11	ELECT	470MF	20%	16V
C3399	1-163-017-00	CERAMIC CHIP	0 0047MF	10%	50V
C3400	1-164-346-11	CERAMIC CHIP	1MF		16V
C3401	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3402	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3406	1-104-664-11	ELECT	47MF	20%	25V
C3407	1-104-664-11	ELECT	47MF	20%	25V
C3408	1-104-664-11	ELECT	47MF	20%	25V
C3409	1-164-004-11	CERAMIC CHIP	0 1MF	10%	25V
C3412	1-126-959-11	ELECT	0 47MF	20%	50V
C3413	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3416	1-126-959-11	ELECT	0.47MF	20%	50V
C3417	1-104-664-11	ELECT	47MF	20%	25V
C3418	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
		<FILTER BLOCK>			
CM3301	1-473-983-11	FILTER BLOCK, COMB			
		<CONNECTOR>			
CN3301	1-764-812-11	CONNECTOR, BOARD TO BOARD 11P			
CN3302	* 1-764-815-11	CONNECTOR, BOARD TO BOARD 18P			
		<DIODE>			
D3302	8-719-404-49	DIODE MA111			
D3303	8-719-404-49	DIODE MA111			
D3313	8-719-404-49	DIODE MA111			
D3314	8-719-404-49	DIODE MA111			
		<FERRITE BEAD>			
FB3301	1-414-233-21	INDUCTOR, FERRITE BEAD			
FB3302	1-414-233-21	INDUCTOR, FERRITE BEAD			
FB3303	1-414-233-21	INDUCTOR, FERRITE BEAD			
FB3304	1-414-233-21	INDUCTOR, FERRITE BEAD			
FB3305	1-414-233-21	INDUCTOR, FERRITE BEAD			
FB3306	1-414-233-21	INDUCTOR, FERRITE BEAD			
FB3307	1-414-233-21	INDUCTOR, FERRITE BEAD			
FB3308	1-414-233-21	INDUCTOR, FERRITE BEAD			
		<IC>			
IC3301	8-759-932-69	IC BU4053BCF-T2			
IC3302	8-752-078-83	IC CXA2019Q			
IC3303	8-759-351-59	IC TC528257J-80(EL)			
IC3304	8-759-477-28	IC SAB9076AH			
IC3306	8-759-231-53	IC TA7805S			
IC3308	8-759-932-69	IC BU4053BCF-T2			
IC3309	8-752-078-83	IC CXA2019Q			
		<COIL>			
L3301	1-408-413-00	INDUCTOR 22UH			
L3304	1-410-462-11	INDUCTOR 2.2UH			
L3305	1-410-462-11	INDUCTOR 2 2UH			
		<TRANSISTOR>			
Q3301	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q3302	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q3303	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q3305	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q3306	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			

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REF. NO.	PART NO	DESCRIPTION		REMARK
Q3307	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		
Q3308	8-729-422-27	TRANSISTOR 2SD601A-Q		
Q3309	8-729-422-27	TRANSISTOR 2SD601A-Q		
Q3310	8-729-422-27	TRANSISTOR 2SD601A-Q		
Q3311	8-729-422-27	TRANSISTOR 2SD601A-Q		
Q3318	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		
Q3319	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		
Q3320	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		
Q3325	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		
Q3326	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		
Q3327	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		
Q3330	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		
Q3333	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		
Q3339	8-729-422-27	TRANSISTOR 2SD601A-Q		
Q3342	8-729-422-27	TRANSISTOR 2SD601A-Q		
Q3343	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		
Q3344	8-729-422-27	TRANSISTOR 2SD601A-Q		
Q3345	8-729-422-27	TRANSISTOR 2SD601A-Q		
Q3346	8-729-422-27	TRANSISTOR 2SD601A-Q		
Q3347	8-729-422-27	TRANSISTOR 2SD601A-Q		
		<RESISTOR>		
R3301	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R3302	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R3303	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R3304	1-216-295-91	CONDUCTOR, CHIP		
R3305	1-216-295-91	CONDUCTOR, CHIP		
R3306	1-216-295-91	CONDUCTOR, CHIP		
R3307	1-216-033-00	METAL GLAZE 220	5%	1/10W
R3311	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3312	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3313	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3314	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R3315	1-216-071-00	METAL GLAZE 8 2K	5%	1/10W
R3316	1-216-077-00	METAL GLAZE 15K	5%	1/10W
R3317	1-216-053-00	METAL GLAZE 1 5K	5%	1/10W
R3318	1-216-033-00	METAL GLAZE 220	5%	1/10W
R3320	1-216-057-00	METAL GLAZE 2 2K	5%	1/10W
R3322	1-216-061-00	METAL GLAZE 3 3K	5%	1/10W
R3323	1-216-065-00	METAL GLAZE 4 7K	5%	1/10W
R3324	1-216-065-00	METAL GLAZE 4 7K	5%	1/10W
R3325	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R3326	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R3327	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3328	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3329	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3330	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3331	1-216-001-00	METAL GLAZE 10	5%	1/10W
R3332	1-216-001-00	METAL GLAZE 10	5%	1/10W
R3333	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3334	1-216-009-00	METAL GLAZE 22	5%	1/10W
R3335	1-216-009-00	METAL GLAZE 22	5%	1/10W
R3336	1-216-009-00	METAL GLAZE 22	5%	1/10W
R3339	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3340	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3341	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3342	1-216-009-00	METAL GLAZE 22	5%	1/10W
R3343	1-216-009-00	METAL GLAZE 22	5%	1/10W
R3344	1-216-009-00	METAL GLAZE 22	5%	1/10W
R3345	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3347	1-216-001-00	METAL GLAZE 10	5%	1/10W
R3348	1-216-001-00	METAL GLAZE 10	5%	1/10W
R3350	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3351	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3352	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3353	1-216-001-00	METAL GLAZE 10	5%	1/10W
R3354	1-216-033-00	METAL GLAZE 220	5%	1/10W
R3355	1-216-033-00	METAL GLAZE 220	5%	1/10W
R3356	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3357	1-216-033-00	METAL GLAZE 220	5%	1/10W
R3358	1-216-001-00	METAL GLAZE 10	5%	1/10W
R3359	1-216-057-00	METAL GLAZE 2 2K	5%	1/10W
R3361	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R3362	1-216-295-91	CONDUCTOR, CHIP		
R3363	1-216-065-00	METAL GLAZE 4 7K	5%	1/10W
R3364	1-216-065-00	METAL GLAZE 4 7K	5%	1/10W
R3365	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R3366	1-216-065-00	METAL GLAZE 4 7K	5%	1/10W
R3367	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R3368	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R3369	1-216-065-00	METAL GLAZE 4 7K	5%	1/10W
R3370	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3372	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3375	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R3379	1-216-308-00	METAL GLAZE 4 7	5%	1/10W
R3380	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R3381	1-216-308-00	METAL GLAZE 4 7	5%	1/10W
R3383	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R3384	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R3385	1-216-295-91	CONDUCTOR, CHIP		
R3386	1-216-295-91	CONDUCTOR, CHIP		
R3387	1-216-295-91	CONDUCTOR, CHIP		
R3408	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R3409	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R3410	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R3413	1-216-295-91	CONDUCTOR, CHIP		
R3414	1-216-295-91	CONDUCTOR, CHIP		
R3415	1-216-295-91	CONDUCTOR, CHIP		
R3419	1-216-033-00	METAL GLAZE 220	5%	1/10W
R3420	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3421	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3422	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3423	1-216-071-00	METAL GLAZE 8 2K	5%	1/10W
R3425	1-216-077-00	METAL GLAZE 15K	5%	1/10W
R3426	1-216-053-00	METAL GLAZE 1 5K	5%	1/10W
R3427	1-216-033-00	METAL GLAZE 220	5%	1/10W
R3430	1-216-057-00	METAL GLAZE 2 2K	5%	1/10W
R3431	1-216-061-00	METAL GLAZE 3 3K	5%	1/10W
R3434	1-216-295-91	CONDUCTOR, CHIP		
R3435	1-216-295-91	CONDUCTOR, CHIP		
R3438	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3450	1-216-065-00	METAL GLAZE 4 7K	5%	1/10W
R3451	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R3452	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R3453	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3454	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3456	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R3457	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R3460	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R3463	1-216-057-00	METAL GLAZE 2 2K	5%	1/10W
R3466	1-216-295-91	CONDUCTOR, CHIP		
R3468	1-216-295-91	CONDUCTOR, CHIP		
R3470	1-216-037-00	METAL GLAZE 330	5%	1/10W
R3471	1-216-109-00	METAL GLAZE 330K	5%	1/10W
R3472	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3473	1-216-295-91	CONDUCTOR, CHIP		
R3475	1-216-037-00	METAL GLAZE 330	5%	1/10W
R3476	1-216-025-91	METAL GLAZE 100	5%	1/10W
R3477	1-216-109-00	METAL GLAZE 330K	5%	1/10W
R3479	1-216-295-91	CONDUCTOR, CHIP		
R3480	1-216-295-91	CONDUCTOR, CHIP		
R3481	1-216-295-91	CONDUCTOR, CHIP		
R3484	1-216-295-91	CONDUCTOR, CHIP		
R3485	1-216-295-91	CONDUCTOR, CHIP		
R3487	1-216-295-91	CONDUCTOR, CHIP		
R3488	1-216-295-91	CONDUCTOR, CHIP		

PX AX A

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite
Ne les remplacer que par une piece portant le numero specifie

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF. NO	PART NO	DESCRIPTION			REMARK
		<CRYSTAL>			
X3301	1-579-583-11	VIBRATOR, CERAMIC			
X3302	1-567-505-11	OSCILLATOR, CRYSTAL			
X3303	1-579-583-11	VIBRATOR, CERAMIC			
X3304	1-567-505-11	OSCILLATOR, CRYSTAL			
**********					
	* A-1298-139-A	AX BOARD, COMPLETE			
		**********			
		<CAPACITOR>			
C101	1-126-960-11	ELECT	1MF	20%	50V
C102	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C104	1-126-964-11	ELECT	10MF	20%	50V
C106	1-104-664-11	ELECT	47MF	20%	25V
C108	1-126-942-61	ELECT	1000MF	20%	25V
C109	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C110	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C111	1-126-960-11	ELECT	1MF	20%	50V
C113	1-104-666-11	ELECT	220MF	20%	25V
C115	1-126-960-11	ELECT	1MF	20%	50V
C1904	1-102-129-00	CERAMIC	0.01MF	10%	50V
C1905	1-126-964-11	ELECT	10MF	20%	50V
C1906	1-102-129-00	CERAMIC	0 01MF	10%	50V
C1907	1-126-964-11	ELECT	10MF	20%	50V
C1908	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
		<CONNECTOR>			
CN101	1-573-301-21	CONNECTOR, BOARD TO BOARD 20P			
CN102	1-573-979-21	CONNECTOR, BOARD TO BOARD 11P			
CN103	* 1-564-507-11	PLUG, CONNECTOR 4P			
		<DIODE>			
D101	8-719-109-90	DIODE RD5.6ESB3			
D103	8-719-911-19	DIODE 1SS119-25			
D104	8-719-911-19	DIODE 1SS119-25			
D105	8-719-911-19	DIODE 1SS119-25			
D106	8-719-911-19	DIODE 1SS119-25			
D107	8-719-911-19	DIODE 1SS119-25			
		<IC>			
IC1901	8-752-058-68	IC CXA1315M			
IC1902	8-759-470-63	IC NJM2145M-TE2			
		<CHIP CONDUCTOR>			
JR1901	1-216-295-91	CONDUCTOR, CHIP			
		<COIL>			
L102	1-410-470-11	INDUCTOR 10UH			
L105	1-410-482-31	INDUCTOR 100UH			
		<TRANSISTOR>			
Q101	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q103	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q104	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q105	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q106	8-729-422-27	TRANSISTOR 2SD601A-Q			
Q1902	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q1903	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q1918	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			

REF NO	PART NO	DESCRIPTION			REMARK
		<RESISTOR>			
R101	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R102	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R103	1-216-689-11	METAL GLAZE	39K	5%	1/10W
R104	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R106	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R107	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R108	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R109	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R112	1-249-421-11	CARBON	2.2K	5%	1/4W
R113	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R114	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R115	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R116	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R117	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1905	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1906	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1920	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2904	1-216-033-00	METAL GLAZE	220	5%	1/10W
R2905	1-216-033-00	METAL GLAZE	220	5%	1/10W
R2909	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2910	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2912	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R2913	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2914	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2915	1-216-073-00	METAL GLAZE	10K	5%	1/10W
		<TUNER>			
TU101	⚠ 8-598-339-20	TUNER, FSS BTF-LA402			
**********					
	* A-1298-140-A	A BOARD, COMPLE			
		**********			
		(KV-35XBR48/35XBR88/37XBR48M)			
	* A-1298-141-A	A BOARD, COMPLE			
		**********			
		(KV-32XBR48/34XBR48C)			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C001	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C003	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C005	1-126-960-11	ELECT	1MF	20%	50V
C009	1-104-664-11	ELECT	47MF	20%	25V
C010	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C012	1-163-010-11	CERAMIC CHIP	0.0012MF	10%	50V
C013	1-163-038-91	CERAMIC CHIP	0 1MF		25V
C014	1-163-017-00	CERAMIC CHIP	0 0047MF	10%	50V
C023	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C028	1-163-227-11	CERAMIC CHIP	10PF	0 5PF	50V
C029	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C030	1-163-009-11	CERAMIC CHIP	0 001MF	10%	50V
C035	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C036	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C037	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C038	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C039	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C040	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C051	1-164-161-11	CERAMIC CHIP	0 0022MF	10%	50V
C053	1-164-232-11	CERAMIC CHIP	0 01MF	10%	50V
C056	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C061	1-163-037-11	CERAMIC CHIP	0 022MF	10%	50V
C062	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C063	1-126-941-11	ELECT	470MF	20%	25V

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REF. NO.	PART NO.	DESCRIPTION			REMARK
C071	1-164-096-11	CERAMIC	0.01MF		50V
C072	1-164-161-11	CERAMIC CHIP	0 0022MF	10%	50V
C075	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C351	1-164-232-11	CERAMIC CHIP	0 01MF	10%	50V
C352	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C353	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C354	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C355	1-126-959-11	ELECT	0 47MF	20%	50V
C356	1-126-963-11	ELECT	4 7MF	20%	50V
C357	1-126-959-11	ELECT	0 47MF	20%	50V
C358	1-164-232-11	CERAMIC CHIP	0 01MF	10%	50V
C359	1-104-665-11	ELECT	100MF	20%	25V
C360	1-126-959-11	ELECT	0 47MF	20%	50V
C361	1-126-959-11	ELECT	0 47MF	20%	50V
C362	1-126-959-11	ELECT	0 47MF	20%	50V
C363	1-164-232-11	CERAMIC CHIP	0 01MF	10%	50V
C364	1-164-232-11	CERAMIC CHIP	0 01MF	10%	50V
C365	1-164-232-11	CERAMIC CHIP	0 01MF	10%	50V
C366	1-137-399-11	FILM	0 1MF	5%	50V
C367	1-137-399-11	FILM	0 1MF	5%	50V
C368	1-137-399-11	FILM	0.1MF	5%	50V
C369	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C370	1-163-809-11	CERAMIC CHIP	0 047MF	10%	25V
C371	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C372	1-126-959-11	ELECT	0 47MF	20%	50V
C373	1-126-960-11	ELECT	1MF	20%	50V
C374	1-164-004-11	CERAMIC CHIP	0 1MF	10%	25V
C375	1-164-004-11	CERAMIC CHIP	0 1MF	10%	25V
C376	1-126-964-11	ELECT	10MF	20%	50V
C377	1-137-399-11	FILM	0 1MF	5%	50V
C378	1-136-244-11	FILM	0 1MF	5%	50V
C379	1-164-232-11	CERAMIC CHIP	0 01MF	10%	50V
C380	1-126-942-61	ELECT	1000MF	20%	25V
C381	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C382	1-164-004-11	CERAMIC CHIP	0 1MF	10%	25V
C383	1-137-399-11	FILM	0 1MF	5%	50V
C384	1-164-004-11	CERAMIC CHIP	0 1MF	10%	25V
C385	1-164-182-11	CERAMIC CHIP	0 0033MF	10%	50V
C386	1-164-232-11	CERAMIC CHIP	0 01MF	10%	50V
C387	1-126-961-11	ELECT	2 2MF	20%	50V
C388	1-126-959-11	ELECT	0 47MF	20%	50V
C390	1-126-960-11	ELECT	1MF	20%	50V
C391	1-163-017-00	CERAMIC CHIP	0 0047MF	10%	50V
C392	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C393	1-164-004-11	CERAMIC CHIP	0 1MF	10%	25V
C394	1-164-004-11	CERAMIC CHIP	0 1MF	10%	25V
C395	1-104-664-11	ELECT	47MF	20%	25V
C397	1-104-664-11	ELECT	47MF	20%	25V
C398	1-126-961-11	ELECT	2 2MF	20%	50V
C399	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C501	1-102-110-00	CERAMIC	220PF	10%	50V
C502	1-126-959-11	ELECT	0 47MF	20%	50V
C503	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C504	1-102-228-00	CERAMIC	470PF	10%	500V
C505	1-102-228-00	CERAMIC	470PF	10%	500V
C506	1-106-383-00	MYLAR	0 047MF	10%	200V
C507	⚠1-162-116-31	CERAMIC	680PF	10%	2KV
C508	1-102-244-00	CERAMIC	220PF	10%	500V
C509	1-162-116-00	CERAMIC	680PF	10%	2KV
C510	1-137-150-11	MYLAR	0 01MF	10%	100V
C511	⚠1-117-652-21	FILM	22000PF	3%	1.2KV
C513	⚠1-136-334-51	FILM	0.033MF	5%	630V (KV-35XBR48/35XBR88/37XBR48M)
C513	⚠1-130-895-51	FILM	0.056MF	5%	400V (KV-32XBR48/34XBR48C)
C514	⚠1-117-891-21	FILM	0.62MF	5%	200V (KV-32XBR48/34XBR48C)
C514	⚠1-117-670-21	FILM	0.82MF	5%	200V (KV-35XBR48/35XBR88/37XBR48M)
C515	1-106-343-00	MYLAR	0 001MF	10%	100V
C516	1-136-113-00	CAPACITOR	0	0	0
C517	1-107-649-11	ELECT	2 2MF	20%	250V
C518	1-106-395-00	MYLAR	0 15MF	10%	200V
C519	1-162-815-11	CERAMIC	47PF	5%	500V
C520	1-164-646-11	CERAMIC	2200PF	10%	500V
C521	1-164-182-11	CERAMIC CHIP	0 0033MF	10%	50V
C522	1-126-960-11	ELECT	1MF	20%	50V
C525	1-102-244-00	CERAMIC	220PF	10%	500V
C526	1-107-662-11	ELECT	22MF	20%	250V
C527	1-162-116-00	CERAMIC	680PF	10%	2KV
C528	1-164-161-11	CERAMIC CHIP	0 0022MF	10%	50V
C529	1-128-551-11	ELECT	22MF	20%	25V
C530	1-137-366-11	FILM	0 0022MF	5%	50V
C531	1-126-965-11	ELECT	22MF	20%	50V
C532	1-126-965-11	ELECT	22MF	20%	50V
C535	1-163-037-11	CERAMIC CHIP	0 022MF	10%	50V
C537	1-126-941-11	ELECT	470MF	20%	25V
C539	1-126-941-11	ELECT	470MF	20%	25V
C540	1-104-710-11	ELECT	22MF	0	160V
C541	1-128-560-11	ELECT	22MF	20%	100V
C542	1-106-383-00	MYLAR	0 047MF	10%	200V
C545	1-106-387-00	MYLAR	0 068MF	10%	200V
C546	1-106-343-00	MYLAR	0 001MF	10%	100V
C547	1-106-343-00	MYLAR	0 001MF	10%	100V
C548	1-164-004-11	CERAMIC CHIP	0 1MF	10%	25V
C549	1-106-375-12	MYLAR	0 022MF		200V
C561	1-126-967-11	ELECT	47MF	20%	50V
C563	1-104-666-11	ELECT	220MF	20%	25V
C564	1-126-960-11	ELECT	1MF	20%	50V
C565	1-126-969-11	ELECT	220MF	20%	50V
C566	1-126-964-11	ELECT	10MF	20%	50V
C568	1-136-169-00	FILM	0 22MF	5%	50V
C571	1-126-941-11	ELECT	470MF	20%	25V
C1002	1-126-964-11	ELECT	10MF	20%	50V
C1003	1-126-960-11	ELECT	1MF	20%	50V
C1004	1-126-960-11	ELECT	1MF	20%	50V
C1101	1-126-943-11	ELECT	2200MF	20%	25V
C1103	1-126-965-11	ELECT	22MF	20%	50V
C1104	1-104-664-11	ELECT	47MF	20%	25V
C1105	1-104-664-11	ELECT	47MF	20%	25V
C1106	1-126-964-11	ELECT	10MF	20%	50V
C1107	1-163-037-11	CERAMIC CHIP	0 022MF	10%	50V
C1108	1-128-551-11	ELECT	22MF	20%	25V
C1109	1-126-964-11	ELECT	10MF	20%	50V
C1110	1-163-227-11	CERAMIC CHIP	10PF	0 5PF	50V
C1111	1-163-227-11	CERAMIC CHIP	10PF	0 5PF	50V
C1112	1-163-227-11	CERAMIC CHIP	10PF	0 5PF	50V
C1117	1-126-960-11	ELECT	1MF	20%	50V
C1118	1-126-960-11	ELECT	1MF	20%	50V
C1351	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1353	1-163-037-11	CERAMIC CHIP	0 022MF	10%	50V
C1355	1-163-009-11	CERAMIC CHIP	0 001MF	10%	50V
C1356	1-126-964-11	ELECT	10MF	20%	50V
C1357	1-107-823-11	CERAMIC CHIP	0 47MF	10%	16V
C1358	1-104-665-11	ELECT	100MF	20%	25V
C1359	1-164-004-11	CERAMIC CHIP	0 1MF	10%	25V
C1360	1-164-232-11	CERAMIC CHIP	0 01MF	10%	50V
C1361	1-163-241-11	CERAMIC CHIP	39PF	5%	50V
C1362	1-163-017-00	CERAMIC CHIP	0 0047MF	10%	50V
C1363	1-164-232-11	CERAMIC CHIP	0 01MF	10%	50V
C1367	1-104-664-11	ELECT	47MF	20%	25V
C1368	1-126-960-11	ELECT	1MF	20%	50V
C1369	1-164-004-11	CERAMIC CHIP	0 1MF	10%	25V
C1370	1-126-964-11	ELECT	10MF	20%	50V
C1371	1-163-017-00	CERAMIC CHIP	0 0047MF	10%	50V
C1372	1-163-017-00	CERAMIC CHIP	0 0047MF	10%	50V
C1373	1-163-133-00	CERAMIC CHIP	470PF	5%	50V

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REF NO	PART NO	DESCRIPTION	REMARK
C1501	1-117-660-21	FILM 0 12MF 5% 200V	(KV-32XBR48/34XBR48C)
C1691	1-104-665-11	ELECT 100MF 20% 25V	
C1692	1-104-665-11	ELECT 100MF 20% 25V	
		<CONNECTOR>	
CN270	1-573-298-11	CONNECTOR, BOARD TO BOARD 20P	
CN271	*1-691-915-11	CONNECTOR, BOARD TO BOARD 15P	
CN351	*1-564-509-11	PLUG, CONNECTOR 6P	
CN461	*1-564-508-11	PLUG, CONNECTOR 5P	
CN501	*1-580-798-11	CONNECTOR PIN (DY) 6P	
CN503	*1-564-508-11	PLUG, CONNECTOR 5P	
CN1001	*1-564-510-11	PLUG, CONNECTOR 7P	
CN1101	1-573-298-11	CONNECTOR, BOARD TO BOARD 20P	
CN1103	1-573-979-21	CONNECTOR, BOARD TO BOARD 11P	
CN1231	*1-564-512-11	PLUG, CONNECTOR 9P	
CN1641	1-564-513-11	PLUG, CONNECTOR 10P	
CN1642	*1-564-507-11	PLUG, CONNECTOR 4P	
CN1643	*1-508-784-00	PIN, CONNECTOR (5mm PITCH) 1P	
CN1941	*1-564-511-11	PLUG, CONNECTOR 8P	
CN3001	1-573-297-21	CONNECTOR, BOARD TO BOARD 18P	
CN3002	1-573-978-21	CONNECTOR, BOARD TO BOARD 11P	
		<DIODE>	
D001	8-719-911-19	DIODE 1SS119-25	
D002	8-719-109-90	DIODE RD5.6ESB3	
D003	8-719-911-19	DIODE 1SS119-25	
D004	8-719-110-17	DIODE RD10ESB2	
D011	8-719-109-72	DIODE RD3 9ESB2	
D012	8-719-911-19	DIODE 1SS119-25	
D013	8-719-911-19	DIODE 1SS119-25	
D014	8-719-911-19	DIODE 1SS119-25	
D015	8-719-911-19	DIODE 1SS119-25	
D353	8-719-911-19	DIODE 1SS119-25	
D356	8-719-911-19	DIODE 1SS119-25	
D360	8-719-110-17	DIODE RD10ESB2	
D362	8-719-911-19	DIODE 1SS119-25	
D363	8-719-404-49	DIODE MA111	
D368	8-719-911-19	DIODE 1SS119-25	
D501	8-719-109-90	DIODE RD5 6ESB3	
D502	8-719-945-80	DIODE ERC06-15S	
D503	8-719-945-80	DIODE ERC06-15S	
D504	8-719-900-26	DIODE ERD29-08J	
D505	8-719-908-03	DIODE GP08D	
D506	8-719-908-03	DIODE GP08D	
D507	8-719-911-19	DIODE 1SS119-25	
D515	8-719-302-43	DIODE EL1Z	
D516	8-719-911-19	DIODE 1SS119-25	
D518	8-719-911-19	DIODE 1SS119-25	
D519	⚠8-719-302-44	DIODE EL1Z-V1	
D520	8-719-911-19	DIODE 1SS119-25	
D521	8-719-921-63	DIODE MTZJ-7 5B	
D522	8-719-911-19	DIODE 1SS119-25	
D530	8-719-979-85	DIODE EGP20G	
D531	8-719-979-85	DIODE EGP20G	
D534	8-719-302-43	DIODE EL1Z	
D536	8-719-109-90	DIODE RD5.6ESB3	
D561	8-719-908-03	DIODE GP08D	
D562	8-719-911-19	DIODE 1SS119-25	
D1001	8-719-404-49	DIODE MA111	
D1002	8-719-404-49	DIODE MA111	
D1003	8-719-110-17	DIODE RD10ESB2	
D1004	8-719-110-17	DIODE RD10ESB2	
D1102	8-719-110-76	DIODE RD33ESB1	
D1103	8-719-109-90	DIODE RD5.6ESB3	
D1301	8-719-404-49	DIODE MA111	
D1302	8-719-911-19	DIODE 1SS119-25	
D1304	8-719-911-19	DIODE 1SS119-25	
D1305	8-719-911-19	DIODE 1SS119-25	
D1306	8-719-404-49	DIODE MA111	
D1641	8-719-979-50	DIODE EGP30D	
D1642	8-719-979-50	DIODE EGP30D	
D1691	8-719-923-83	DIODE MTZJ-T-77-13A	
		<DELAY LINE>	
DL351	1-416-231-11	DELAY LINE	
		<FERRITE BEAD>	
FB501	1-410-397-21	FERRITE BEAD INDUCTOR 1 1UH	
FB502	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB503	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
		<IC>	
IC001	8-752-886-53	IC CXP85856A-001S	
IC002	8-759-518-23	IC X24C04S8	
IC351	8-752-076-76	IC CXA2025AS	
IC352	8-752-080-75	IC CXA2039M-T6	
IC353	8-759-462-91	IC TA1226N	
IC501	8-759-700-07	IC NJM2903M	
IC561	8-759-980-58	IC TDA8172	
IC1001	8-752-058-68	IC CXA1315M	
		<CHIP CONDUCTOR>	
JR001	1-216-295-91	CONDUCTOR, CHIP	
JR052	1-216-295-91	CONDUCTOR, CHIP	
JR053	1-216-295-91	CONDUCTOR, CHIP	
JR054	1-216-295-91	CONDUCTOR, CHIP	
JR4120	1-216-295-91	CONDUCTOR, CHIP	
		<COIL>	
L001	1-410-482-31	INDUCTOR 100UH	
L002	1-410-482-31	INDUCTOR 100UH	
L003	1-410-470-11	INDUCTOR 10UH	
L004	1-410-470-11	INDUCTOR 10UH	
L351	1-410-476-11	INDUCTOR 33UH	
L352	1-410-482-31	INDUCTOR 100UH	
L501	⚠1-409-861-11	COIL, HORIZONTAL LINEARITY	
L502	1-412-552-11	INDUCTOR 2 2mH	
L503	1-406-677-11	COIL, CHOKE 10mH	
L511	1-406-607-41	COIL, CHOKE 15mH	
L517	1-412-552-11	INDUCTOR 2.2mH	
L541	1-406-677-11	COIL, CHOKE 10mH	
L1101	1-410-482-31	INDUCTOR 100UH	
L1102	1-410-470-11	INDUCTOR 10UH	
L1351	1-410-470-11	INDUCTOR 10UH	
		<TRANSISTOR>	
Q001	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q002	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q003	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q004	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q005	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q010	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q011	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q012	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q013	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q014	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q015	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q016	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q017	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q304	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	

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REF. NO.	PART NO.	DESCRIPTION	REMARK
Q305	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q306	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q351	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q354	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q356	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q357	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q358	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q359	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q360	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q361	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q362	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q363	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q364	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q365	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q366	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q367	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q368	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q369	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q370	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q501	8-729-140-50	TRANSISTOR 2SC3209LK	
Q502	⚠ 8-729-035-75	TRANSISTOR 2SC5148(LBSONY)	
Q503	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q504	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q511	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q512	8-729-809-29	TRANSISTOR 2SC4159-E	
Q530	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q531	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q561	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q562	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q563	8-729-105-08	TRANSISTOR 2SA1330-O6	
Q1001	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1102	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1103	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1351	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1352	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1353	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q1354	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1691	8-729-209-15	TRANSISTOR 2SD2012	
Q1692	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q1693	8-729-422-27	TRANSISTOR 2SD601A-Q	

<RESISTOR>

R001	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R002	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R003	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R004	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R006	1-247-815-91	CARBON	220	5%	1/4W
R007	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R008	1-247-815-91	CARBON	220	5%	1/4W
R009	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R010	1-216-041-00	METAL GLAZE	470	5%	1/10W
R011	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R012	1-216-033-00	METAL GLAZE	220	5%	1/10W
R013	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R014	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R015	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R016	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R019	1-249-425-11	CARBON	4.7K	5%	1/4W
R020	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R022	1-249-429-11	CARBON	10K	5%	1/4W
R023	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R025	1-216-033-00	METAL GLAZE	220	5%	1/10W
R026	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R028	1-249-429-11	CARBON	10K	5%	1/4W
R029	1-216-025-91	METAL GLAZE	100	5%	1/10W
R030	1-249-425-11	CARBON	4.7K	5%	1/4W
R031	1-247-815-91	CARBON	220	5%	1/4W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R032	1-247-815-91	CARBON	220	5%	1/4W
R034	1-247-815-91	CARBON	220	5%	1/4W
R035	1-247-815-91	CARBON	220	5%	1/4W
R036	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R037	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R038	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R039	1-247-807-31	CARBON	100	5%	1/4W
R040	1-247-815-91	CARBON	220	5%	1/4W
R041	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R042	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R043	1-216-033-00	METAL GLAZE	220	5%	1/10W
R044	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R045	1-247-815-91	CARBON	220	5%	1/4W
R046	1-247-815-91	CARBON	220	5%	1/4W
R047	1-249-417-11	CARBON	1K	5%	1/4W
R048	1-249-417-11	CARBON	1K	5%	1/4W
R049	1-249-417-11	CARBON	1K	5%	1/4W
R050	1-247-815-91	CARBON	220	5%	1/4W
R051	1-247-815-91	CARBON	220	5%	1/4W
R052	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R053	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R054	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R055	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R056	1-216-033-00	METAL GLAZE	220	5%	1/10W
R057	1-249-417-11	CARBON	1K	5%	1/4W
R058	1-216-033-00	METAL GLAZE	220	5%	1/10W
R064	1-247-815-91	CARBON	220	5%	1/4W
R065	1-247-815-91	CARBON	220	5%	1/4W
R066	1-247-815-91	CARBON	220	5%	1/4W
R067	1-249-413-11	CARBON	470	5%	1/4W
R068	1-247-815-91	CARBON	220	5%	1/4W
R069	1-247-815-91	CARBON	220	5%	1/4W
R070	1-249-421-11	CARBON	2.2K	5%	1/4W
R071	1-247-815-91	CARBON	220	5%	1/4W
R072	1-216-033-00	METAL GLAZE	220	5%	1/10W
R073	1-216-033-00	METAL GLAZE	220	5%	1/10W
R074	1-216-033-00	METAL GLAZE	220	5%	1/10W
R075	1-216-033-00	METAL GLAZE	220	5%	1/10W
R076	1-216-033-00	METAL GLAZE	220	5%	1/10W
R077	1-216-033-00	METAL GLAZE	220	5%	1/10W
R078	1-249-417-11	CARBON	1K	5%	1/4W
R079	1-216-033-00	METAL GLAZE	220	5%	1/10W
R080	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R081	1-216-025-91	METAL GLAZE	100	5%	1/10W
R082	1-216-025-91	METAL GLAZE	100	5%	1/10W
R083	1-249-429-11	CARBON	10K	5%	1/4W
R084	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R087	1-247-815-91	CARBON	220	5%	1/4W
R090	1-216-033-00	METAL GLAZE	220	5%	1/10W
R092	1-249-429-11	CARBON	10K	5%	1/4W
R097	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R099	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R131	1-216-037-00	METAL GLAZE	330	5%	1/10W
R132	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R133	1-216-037-00	METAL GLAZE	330	5%	1/10W
R135	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R136	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R137	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R319	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R320	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R321	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R328	1-216-295-91	CONDUCTOR, CHIP			
R333	1-216-295-91	CONDUCTOR, CHIP			
R336	1-249-387-11	CARBON	3.3	5%	1/4W F
R337	1-216-347-11	METAL OXIDE	0.68	5%	1W F
R348	1-249-389-11	CARBON	4.7	5%	1/4W F
R349	1-216-295-91	CONDUCTOR, CHIP			
R350	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R352	1-208-803-11	METAL GLAZE	7.5K	0.50%	1/10W

RM-Y144 RM-Y144 RM-Y144 RM-Y144 RM-Y144

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- The components identified by ⋈ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF. NO.	PART NO	DESCRIPTION			REMARK
R353	1-208-788-11	METAL GLAZE	1.8K	0 50%	1/10W
R354	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R355	1-216-033-00	METAL GLAZE	220	5%	1/10W
R356	1-216-033-00	METAL GLAZE	220	5%	1/10W
R358	1-247-815-91	CARBON	220	5%	1/4W
R359	1-247-815-91	CARBON	220	5%	1/4W
R360	1-247-815-91	CARBON	220	5%	1/4W
R361	1-216-025-91	METAL GLAZE	100	5%	1/10W
R362	1-216-025-91	METAL GLAZE	100	5%	1/10W
R363	1-216-025-91	METAL GLAZE	100	5%	1/10W
R364	1-216-101-00	METAL GLAZE	150K	5%	1/10W
R365	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R366	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R367	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R368	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R369	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R370	1-249-417-11	CARBON	1K	5%	1/4W
R371	1-216-053-00	METAL GLAZE	1 5K	5%	1/10W
R372	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R373	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R374	1-216-121-91	METAL GLAZE	1M	5%	1/10W
				(KV-32XBR48/34XBR48C)	
R374	1-216-129-00	METAL GLAZE	2 2M	5%	1/10W
				(KV-35XBR48/35XBR88/37XBR48M)	
R375	1-216-025-91	METAL GLAZE	100	5%	1/10W
R376	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R378	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R379	1-216-033-00	METAL GLAZE	220	5%	1/10W
R380	1-247-815-91	CARBON	220	5%	1/4W
R381	1-247-815-91	CARBON	220	5%	1/4W
R382	1-216-037-00	METAL GLAZE	330	5%	1/10W
R383	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R384	1-216-109-00	METAL GLAZE	330K	5%	1/10W
R385	1-249-421-11	CARBON	2.2K	5%	1/4W
R386	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R387	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R388	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R389	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R390	1-216-041-00	METAL GLAZE	470	5%	1/10W
R391	1-208-810-11	METAL GLAZE	15K	0.50%	1/10W
R392	1-216-025-91	METAL GLAZE	100	5%	1/10W
R393	1-216-041-00	METAL GLAZE	470	5%	1/10W
R394	1-216-057-00	METAL GLAZE	2 2K	5%	1/10W
R395	1-216-061-00	METAL GLAZE	3 3K	5%	1/10W
R396	1-249-417-11	CARBON	1K	5%	1/4W
R397	1-247-843-11	CARBON	3 3K	5%	1/4W
R398	1-216-095-00	METAL GLAZE	82K	5%	1/10W
R501	1-216-041-00	METAL GLAZE	470	5%	1/10W
R502	1-216-065-00	METAL GLAZE	4 7K	5%	1/10W
R503	1-249-425-11	CARBON	4 7K	5%	1/4W F
R504	⚠1-215-917-51	METAL OXIDE	1K	5%	3W F
R505	1-247-863-91	CARBON	22K	5%	1/4W
R506	1-215-861-00	METAL OXIDE	47	5%	1W F
R507	1-249-401-11	CARBON	47	5%	1/4W
R508	1-249-425-11	CARBON	4 7K	5%	1/4W
R509	1-260-324-11	CARBON	470	5%	1/2W
R510	⚠1-215-861-51	METAL OXIDE	47	5%	1W F
R511	⚠1-215-885-51	METAL OXIDE	68	5%	2W F
				(KV-32XBR48/34XBR48C)	
R511	⚠1-215-886-51	METAL OXIDE	100	5%	2W F
				(KV-35XBR48/35XBR88/37XBR48M)	
R512	⚠1-215-886-51	METAL OXIDE	100	5%	2W F
R514	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R515	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R516	1-216-057-00	METAL GLAZE	2 2K	5%	1/10W
R517	1-249-417-11	CARBON	1K	5%	1/4W
R518	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R519	1-249-413-11	CARBON	470	5%	1/4W
R521	1-216-081-00	METAL GLAZE	22K	5%	1/10W

REF. NO	PART NO.	DESCRIPTION			REMARK
R523	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R524	1-249-429-11	CARBON	10K	5%	1/4W
R525	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R526	1-215-880-00	METAL OXIDE	10	5%	2W F
				(KV-35XBR48/35XBR88/37XBR48M)	
R527	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R528	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R529	1-208-812-11	METAL GLAZE	18K	0 50%	1/10W
				(KV-35XBR48/35XBR88/37XBR48M)	
R529	1-208-814-11	METAL GLAZE	22K	0 50%	1/10W
				(KV-32XBR48/34XBR48C)	
⋈R530	⚠	METAL GLAZE			1/10W
⋈R531	⚠	METAL GLAZE			1/10W
				(KV-32XBR48/34XBR48C)	
R531	1-208-838-11	METAL GLAZE	220K	0.50%	1/10W
				(KV-35XBR48/35XBR88/37XBR48M)	
R532	1-208-760-11	METAL GLAZE	120	0.50%	1/10W
R533	⚠1-215-878-51	METAL OXIDE	33K	5%	1W F
				(KV-35XBR48/35XBR88/37XBR48M)	
R533	⚠1-215-879-51	METAL OXIDE	47K	5%	1W F
				(KV-32XBR48/34XBR48C)	
R534	1-249-429-11	CARBON	10K	5%	1/4W
R535	1-216-101-00	METAL GLAZE	150K	5%	1/10W
				(KV-32XBR48/34XBR48C)	
R535	1-216-103-00	METAL GLAZE	180K	5%	1/10W
				(KV-35XBR48/35XBR88/37XBR48M)	
R536	⚠1-260-288-71	CARBON	0.47	5%	1/2W
R537	⚠1-260-288-71	CARBON	0.47	5%	1/2W
R538	1-247-887-00	CARBON	220K	5%	1/4W
R539	1-216-057-00	METAL GLAZE	2 2K	5%	1/10W
R540	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R541	1-249-377-11	CARBON	0.47	5%	1/4W F
R542	1-249-397-11	CARBON	22	5%	1/4W F
R543	1-249-377-11	CARBON	0.47	5%	1/4W F
R544	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R545	1-249-387-11	CARBON	3 3	5%	1/4W F
R546	1-215-452-00	METAL	20K	1%	1/4W
				(KV-35XBR48/35XBR88/37XBR48M)	
R546	1-215-453-00	METAL	22K	1%	1/4W
				(KV-32XBR48/34XBR48C)	
R547	1-215-457-00	METAL	33K	1%	1/4W
R549	1-215-437-00	METAL	4 7K	1%	1/4W
R550	⚠1-249-377-91	CARBON	0.47	5%	1/4W F
R551	⚠1-215-873-51	METAL OXIDE	4.7K	5%	1W F
R553	⚠1-249-377-91	CARBON	0.47	5%	1/4W F
R561	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R563	⚠1-216-349-51	METAL OXIDE	1	5%	1W F
R564	1-249-393-11	CARBON	10	5%	1/4W
R565	⚠1-215-889-51	METAL OXIDE	330	5%	2W F
R566	1-216-069-00	METAL GLAZE	6 8K	5%	1/10W
R567	⚠1-249-385-91	CARBON	2.2	5%	1/4W F
R568	1-216-069-00	METAL GLAZE	6 8K	5%	1/10W
R569	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R570	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R571	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R572	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R573	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R574	⚠1-216-365-51	METAL OXIDE	0.47	5%	2W F
R575	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R576	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R577	1-249-441-11	CARBON	100K	5%	1/4W
R578	1-208-784-11	METAL GLAZE	1 2K	0 50%	1/10W
R579	1-208-842-11	METAL GLAZE	330K	0 50%	1/10W
R580	1-249-441-11	CARBON	100K	5%	1/4W
R1001	1-247-807-31	CARBON	100	5%	1/4W
R1002	1-247-807-31	CARBON	100	5%	1/4W
R1003	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1004	1-216-067-00	METAL GLAZE	5 6K	5%	1/10W
R1005	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1006	1-247-807-31	CARBON	100	5%	1/4W

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite
Ne les remplacer que par une piece portant le numero specifie

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REF. NO.	PART NO	DESCRIPTION			REMARK
R1007	1-247-807-31	CARBON	100	5%	1/4W
R1008	1-216-065-00	METAL GLAZE	4 7K	5%	1/10W
R1009	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1010	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1011	1-249-387-11	CARBON	3 3	5%	1/4W F
R1012	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1101	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1102	1-215-900-11	METAL OXIDE	22K	5%	2W F
R1103	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1104	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R1105	1-216-689-11	METAL GLAZE	39K	5%	1/10W
R1106	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1107	1-216-065-00	METAL GLAZE	4 7K	5%	1/10W
R1108	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1109	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1110	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1111	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1113	1-249-417-11	CARBON	1K	5%	1/4W
R1114	1-249-417-11	CARBON	1K	5%	1/4W
R1115	1-216-041-00	METAL GLAZE	470	5%	1/10W
R1117	1-249-425-11	CARBON	4 7K	5%	1/4W
R1118	1-249-425-11	CARBON	4 7K	5%	1/4W
R1120	1-216-057-00	METAL GLAZE	2 2K	5%	1/10W
R1121	1-216-037-00	METAL GLAZE	330	5%	1/10W
R1122	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R1123	1-216-037-00	METAL GLAZE	330	5%	1/10W
R1125	1-216-057-00	METAL GLAZE	2 2K	5%	1/10W
R1126	1-216-037-00	METAL GLAZE	330	5%	1/10W
R1127	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R1128	1-216-037-00	METAL GLAZE	330	5%	1/10W
R1130	1-216-057-00	METAL GLAZE	2 2K	5%	1/10W
R1301	1-249-401-11	CARBON	47	5%	1/4W
R1302	1-249-401-11	CARBON	47	5%	1/4W
R1303	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1304	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1305	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R1306	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1307	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1308	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1309	1-216-051-00	METAL GLAZE	1 2K	5%	1/10W
R1310	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1311	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1312	1-216-057-00	METAL GLAZE	2 2K	5%	1/10W
R1313	1-208-780-11	METAL GLAZE	820	0 50%	1/10W
R1314	1-208-782-11	METAL GLAZE	1K	0 50%	1/10W
R1315	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1316	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R1317	1-216-105-91	METAL GLAZE	220K	5%	1/10W
R1318	1-216-065-00	METAL GLAZE	4 7K	5%	1/10W
R1319	1-260-290-71	CARBON	0 68	5%	1/2W
R1322	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1323	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1326	1-249-417-11	CARBON	1K	5%	1/4W
R1329	1-216-295-91	CONDUCTOR, CHIP			
R1330	1-216-065-00	METAL GLAZE	4 7K	5%	1/10W
R1333	1-216-065-00	METAL GLAZE	4 7K	5%	1/10W
R1337	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1351	1-247-815-91	CARBON	220	5%	1/4W
R1352	1-247-815-91	CARBON	220	5%	1/4W
R1353	1-247-815-91	CARBON	220	5%	1/4W
R1354	1-216-033-00	METAL GLAZE	220	5%	1/10W
R1355	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1356	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1357	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1358	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1359	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1360	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1361	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1362	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R1363	1-216-057-00	METAL GLAZE	2 2K	5%	1/10W
R1364	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R1365	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1366	1-216-107-00	METAL GLAZE	270K	5%	1/10W
R1369	1-216-093-00	METAL GLAZE	68K	5%	1/10W
R1371	1-216-295-91	CONDUCTOR, CHIP			
R1373	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1374	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1385	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1386	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1387	1-249-429-11	CARBON	10K	5%	1/4W
R1388	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1389	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1390	1-249-417-11	CARBON	1K	5%	1/4W
R1391	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R1392	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1393	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1394	1-208-785-11	METAL GLAZE	1 3K	0 50%	1/10W
R1395	1-208-782-11	METAL GLAZE	1K	0 50%	1/10W
R1396	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1397	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1398	1-216-057-00	METAL GLAZE	2 2K	5%	1/10W
R1399	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1691	1-216-033-00	METAL GLAZE	220	5%	1/10W
R1692	1-216-397-11	METAL OXIDE	4 7	5%	3W F
R1693	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1694	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1695	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1696	1-216-081-00	METAL GLAZE	22K	5%	1/10W

<SWITCH>

S501	1-572-707-11	SWITCH, LEVER

<TRANSFORMER>

T501	1-437-210-11	TRANSFORMER, HORIZONTAL DRIVE
T502	⚠ 1-429-408-11	TRANSFORMER, FERRITE (PMT) (KV-35XBR48/35XBR88/37XBR48M)
T502	⚠ 1-424-545-22	TRANSFORMER, FERRITE (PMT) (KV-32XBR48/34XBR48C)
T503	⚠ 1-453-244-11	TRANSFORMER ASSY, FLYBACK (NX-2612//X4C) (KV-32XBR48/34XBR48C)
T503	⚠ X-4034-797-1	TRANSFORMER ASSY, FLYBACK (NX-3005//J1C) (KV-35XBR48/35XBR88/37XBR48M)
T504	1-413-059-00	TRANSFORMER, FERRITE (DFT)

<TUNER>

TU102	⚠ 8-598-340-20	TUNER, FSS BTF-WA404

<CRYSTAL>

X001	1-578-774-11	VIBRATOR, CRYSTAL
X353	1-567-505-11	OSCILLATOR, CRYSTAL
X354	1-579-583-11	VIBRATOR, CERAMIC

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G

REF. NO.	PART NO.	DESCRIPTION	REMARK
	* A-1316-323-A	G BOARD, COMPLE **********	(KV-35XBR48/35XBR88/37XBR48M)
	* A-1316-324-A	G BOARD, COMPLE (KV-32XBR48) **********	
	* A-1316-331-A	G BOARD, COMPLE (KV-34XBR48C) **********	
	4-382-854-11	SCREW (M3X10), P, SW (+)	
		<CAPACITOR>	
C601	1-130-711-00	FILM 0.22MF 20% 250V	(KV-35XBR48/35XBR88/37XBR48M)
C602	1-126-964-11	ELECT 10MF 20% 50V	
C603	⚠ 1-113-907-51	CERAMIC 0.0022MF 20% 250V	
C605	⚠ 1-136-311-51	FILM 0.47MF 20% 125V	
C606	⚠ 1-117-894-11	ELECT 560MF 20% 250V	
C607	⚠ 1-117-894-11	ELECT 560MF 20% 250V	
C608	1-165-127-11	CERAMIC 470PF 10% 500V	
C609	1-136-175-00	FILM 0.68MF 5% 50V	
C610	1-136-175-00	FILM 0.68MF 5% 50V	
C611	1-136-171-00	FILM 0.33MF 5% 50V	
C612	1-136-171-00	FILM 0.33MF 5% 50V	
C613	1-164-646-11	CERAMIC 2200PF 10% 500V	
C615	1-129-722-00	FILM 0 047MF 5% 630V	
C641	1-128-550-11	ELECT 2200MF 20% 50V	
C643	1-107-641-11	ELECT 220MF 20% 160V	(except KV-34XBR48C)
C643	1-123-024-21	ELECT 33MF 160V	(KV-34XBR48C)
C647	1-104-665-11	ELECT 100MF 20% 25V	
C648	1-126-941-11	ELECT 470MF 20% 25V	
C651	1-137-366-11	FILM 0.0022MF 5% 50V	(except KV-34XBR48C)
C651	1-137-370-11	FILM 0 01MF 5% 50V	(KV-34XBR48C)
C652	1-106-343-00	MYLAR 0 001MF 10% 200V	(KV-34XBR48C)
C652	1-106-351-00	MYLAR 0.0022MF 200V	(except KV-34XBR48C)
C653	1-107-636-11	ELECT 10MF 20% 160V	
C654	1-164-625-11	CERAMIC 680PF 10% 500V	
C655	1-164-625-11	CERAMIC 680PF 10% 500V	
C656	1-164-625-11	CERAMIC 680PF 10% 500V	
C657	1-164-625-11	CERAMIC 680PF 10% 500V	
C658	1-126-960-11	ELECT 1MF 20% 50V	
C660	1-126-943-11	ELECT 2200MF 20% 25V	
C661	1-126-941-11	ELECT 470MF 20% 25V	
C690	1-164-645-11	CERAMIC 1000PF 10% 500V	
C691	1-164-645-11	CERAMIC 1000PF 10% 500V	
		<CONNECTOR>	
CN601	* 1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P	(KV-35XBR48/35XBR88/37XBR48M)
CN602	* 1-580-844-11	PIN, CONNECTOR (POWER)	
CN603	* 1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P	(KV-35XBR48/35XBR88/37XBR48M)
CN604	* 1-508-765-00	PIN, CONNECTOR (5mm PITCH) 3P	(KV-32XBR48)(KV-34XBR48C)
CN641	1-564-513-11	PLUG, CONNECTOR 10P	
CN642	* 1-564-507-11	PLUG, CONNECTOR 4P	
CN643	* 1-508-784-00	PIN, CONNECTOR (5mm PITCH) 1P	
		<DIODE>	
D601	8-719-911-19	DIODE 1SS119-25	
D602	⚠ 8-719-510-63	DIODE D4SB60L	
D615	8-719-028-45	DIODE D2L20U	
D641	8-719-052-92	DIODE D10SBS4F	
D642	8-719-510-02	DIODE D1NS4	
D643	8-719-028-45	DIODE D2L20U	
D644	8-719-028-45	DIODE D2L20U	
D645	8-719-028-45	DIODE D2L20U	
D646	8-719-510-13	DIODE D10SC4MR	
D647	8-719-510-26	DIODE D1NL20-TA2	
D648	8-719-057-52	DIODE EZ0150AV1	
D649	8-719-510-02	DIODE D1NS4	
D650	8-719-510-02	DIODE D1NS4	
D651	8-719-911-19	DIODE 1SS119-25	
D652	8-719-921-63	DIODE MTZJ-7 5B	
D653	8-719-911-19	DIODE 1SS119-25	
		<FUSE>	
F601	⚠ 1-532-506-51	FUSE (6.3A/250V) (KV-34XBR48C)	
	1-533-223-11	HOLDER, FUSE , F601	
F601	⚠ 1-576-193-11	FUSE (6.3A/125V) (except KV-34XBR48C)	
	1-533-223-11	HOLDER, FUSE , F601	
		<FERRITE BEAD>	
FB601	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB602	1-410-396-41	FERRITE BEAD INDUCTOR 0 45UH	
FB603	1-410-396-41	FERRITE BEAD INDUCTOR 0 45UH	
FB604	1-410-396-41	FERRITE BEAD INDUCTOR 0 45UH	
FB641	1-410-397-21	FERRITE BEAD INDUCTOR 1 1UH	
FB642	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB645	1-410-397-21	FERRITE BEAD INDUCTOR 1 1UH	
FB647	1-410-397-21	FERRITE BEAD INDUCTOR 1 1UH	
		<IC>	
IC601	⚠ 8-729-041-12	TRANSISTOR MX0841AB-F	
IC641	8-759-198-03	IC PQ09RF21	
IC642	8-759-701-56	IC NJM78M05FA	
IC643	8-749-012-13	IC DM-58	
		<COIL>	
L642	1-412-529-11	INDUCTOR 22UH	
L643	1-412-525-31	INDUCTOR 10UH	
L644	1-412-531-31	INDUCTOR 33UH	
		<TRANSISTOR>	
Q643	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q644	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q645	8-729-026-41	TRANSISTOR 2SA933AS-QRT	
Q651	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q652	8-729-119-78	TRANSISTOR 2SC2785-HFE	
		<RESISTOR>	
R603	⚠ 1-219-512-91	RESISTOR(SURGE RESISTANT) 2.2M	(except KV-34XBR48C)
R603	⚠ 1-247-289-11	CARBON 8.2M 5% 1W	(34XBR48C)
R607	⚠ 1-202-933-61	FUSIBLE 0.1 10% 1/2W F	
R608	1-216-373-11	METAL OXIDE 2 2 5% 2W F	
R611	1-216-373-11	METAL OXIDE 2 2 5% 2W F	
R612	1-220-388-51	METAL OXIDE 68K 5% 1W F	
R613	1-220-388-51	METAL OXIDE 68K 5% 1W F	
R614	1-220-388-51	METAL OXIDE 68K 5% 1W F	
R615	1-220-388-51	METAL OXIDE 68K 5% 1W F	
R622	⚠ 1-212-958-61	FUSIBLE 10 5% 1/2W F	
R623	1-202-981-11	WIREWOUND 0.82 5% 20W	(except KV-34XBR48C)
R623	1-220-921-21	WIREWOUND 3 3 5% 20W	(KV-34XBR48C)
R624	1-247-895-91	CARBON 470K 5% 1/4W	

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Ne les remplacer que par une piece portant le numero specifie

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REF. NO.	PART NO	DESCRIPTION				REMARK
R625	1-247-895-91	CARBON	470K	5%	1/4W	
R641	1-247-843-11	CARBON	3 3K	5%	1/4W	
R642	1-247-843-11	CARBON	3.3K	5%	1/4W	
R643	1-249-387-11	CARBON	3 3	5%	1/4W	F
R645	⚠ 1-249-393-91	CARBON	10	5%	1/4W	F
R648	1-247-887-00	CARBON	220K	5%	1/4W	(except KV-34XBR48C)
R648	1-247-891-00	CARBON	330K	5%	1/4W	(KV-34XBR48C)
R649	1-249-425-11	CARBON	4 7K	5%	1/4W	F (except KV-34XBR48C)
R649	1-249-433-11	CARBON	22K	5%	1/4W	F (KV-34XBR48C)
R650	1-249-425-11	CARBON	4 7K	5%	1/4W	
R653	1-247-863-91	CARBON	22K	5%	1/4W	
R655	1-247-863-91	CARBON	22K	5%	1/4W	
R656	1-249-429-11	CARBON	10K	5%	1/4W	
R657	1-247-863-91	CARBON	22K	5%	1/4W	
R659	1-249-429-11	CARBON	10K	5%	1/4W	
R660	⚠ 1-249-393-91	CARBON	10	5%	1/4W	F
R661	1-249-419-11	CARBON	1 5K	5%	1/4W	F
R662	1-249-429-11	CARBON	10K	5%	1/4W	
R665	1-249-421-11	CARBON	2.2K	5%	1/4W	
R666	⚠ 1-249-377-91	CARBON	0.47	5%	1/4W	F
R667	⚠ 1-249-377-91	CARBON	0.47	5%	1/4W	F
R668	⚠ 1-249-377-91	CARBON	0.47	5%	1/4W	F
R670	⚠ 1-249-377-91	CARBON	0.47	5%	1/4W	F
R671	⚠ 1-249-377-91	CARBON	0.47	5%	1/4W	F
R672	⚠ 1-249-377-91	CARBON	0.47	5%	1/4W	F
R678	1-247-843-11	CARBON	3.3K	5%	1/4W	
R679	1-247-863-91	CARBON	22K	5%	1/4W	
R680	1-249-377-11	CARBON	0.47	5%	1/4W	F
R681	⚠ 1-202-933-61	FUSIBLE	0.1	10%	1/2W	F

<RELAY>

RY601	⚠ 1-755-146-11	RELAY

<TRANSFORMER>

T602	⚠ 1-426-717-11	TRANSFORMER, LINE FILTER (LFT)
T603	⚠ 1-429-992-11	TRANSFORMER, CONVERTER (PRT)
T605	⚠ 1-431-467-11	TRANSFORMER, CONVERTER (PIT)

<THERMISTOR>

THP601	⚠ 1-809-539-11	THERMISTOR, POSITIVE (except KV-34XBR48C)
THP601	⚠ 1-809-827-11	THERMISTOR, POSITIVE (KV-34XBR48C)

<VARISTOR>

VDR601	1-801-070-41	VARISTOR ERZV10D431
VDR602	⚠ 1-801-074-41	VARISTOR ERZV10D271 (except KV-34XBR48C)
VDR602	⚠ 1-809-267-41	VARISTOR ERZV10D471 (KV-34XBR48C)

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* A-1331-692-A	C BOARD, COMPLETE	(KV-35XBR48/35XBR88/37XBR48M)
	**********	
* A-1331-694-A	C BOARD, COMPLETE	(KV- 32XBR48/34XBR48C)
	**********	

<CAPACITOR>

C1761	1-102-508-91	CERAMIC	10PF	0.5PF	50V
C1762	1-104-664-11	ELECT	47MF	20%	25V
C1763	1-102-508-91	CERAMIC	10PF	0 5PF	50V
C1764	1-104-664-11	ELECT	47MF	20%	25V
C1765	1-102-508-91	CERAMIC	10PF	0.5PF	50V
C1767	1-102-129-00	CERAMIC	0 01MF	10%	50V
C1768	1-102-129-00	CERAMIC	0.01MF	10%	50V
C1769	1-126-960-11	ELECT	1MF	20%	50V
C1770	1-102-157-00	CERAMIC	560PF	10%	500V
C1771	1-126-772-11	ELECT	1MF	20%	250V
C1772	1-102-129-00	CERAMIC	0 01MF	10%	50V
C1773	1-102-157-00	CERAMIC	560PF	10%	500V
C1774	1-126-772-11	ELECT	1MF	20%	250V
C1775	1-102-129-00	CERAMIC	0 01MF	10%	50V
C1776	1-102-157-00	CERAMIC	560PF	10%	500V
C1777	1-126-772-11	ELECT	1MF	20%	250V
C1778	1-102-074-00	CERAMIC	0 001MF	10%	50V
C1779	1-162-116-00	CERAMIC	680PF	10%	2KV
C1783	1-106-375-12	MYLAR	0 022MF		200V
C1784	1-106-375-12	MYLAR	0 022MF		200V
C1786	1-107-651-11	ELECT	4.7MF	20%	250V

<CONNECTOR>

CN1761	* 1-564-509-11	PLUG, CONNECTOR 6P
CN1764	* 1-564-508-11	PLUG, CONNECTOR 5P
CN1765	1-695-915-11	TAB (CONTACT)
CN1766	1-695-915-11	TAB (CONTACT)

<DIODE>

D1712	8-719-901-83	DIODE 1SS83
D1713	8-719-908-03	DIODE GP08D
D1762	8-719-911-19	DIODE 1SS119-25
D1763	8-719-911-19	DIODE 1SS119-25
D1764	8-719-911-19	DIODE 1SS119-25
D1767	8-719-109-90	DIODE RD5 6ESB3
D1768	8-719-911-19	DIODE 1SS119-25
D1769	8-719-109-71	DIODE RD3 9ESB1
D1770	8-719-901-83	DIODE 1SS83
D1771	8-719-901-83	DIODE 1SS83

<IC>

IC1761	8-759-346-42	IC TDA6101Q/N3
IC1762	8-759-346-42	IC TDA6101Q/N3
IC1763	8-759-346-42	IC TDA6101Q/N3

<JACK>

J1761	⚠ 1-251-388-11	SOCKET, PICTURE TUBE

<COIL>

L1761	1-410-470-11	INDUCTOR 10UH

<TRANSISTOR>

Q1761	8-729-026-41	TRANSISTOR 2SA933AS-QRT

<RESISTOR>

R1761	1-215-413-00	METAL	470	1%	1/4W
R1762	1-215-413-00	METAL	470	1%	1/4W
R1763	1-215-424-00	METAL	1 3K	1%	1/4W
R1764	1-249-441-11	CARBON	100K	5%	1/4W
R1765	1-247-863-91	CARBON	22K	5%	1/4W
R1766	1-215-424-00	METAL	1 3K	1%	1/4W
R1767	1-249-437-11	CARBON	47K	5%	1/4W
R1768	1-247-807-31	CARBON	100	5%	1/4W
R1769	1-249-417-11	CARBON	1K	5%	1/4W
R1770	1-215-424-00	METAL	1 3K	1%	1/4W

C HX HF WA

REF NO	PART NO	DESCRIPTION			REMARK
R1771	1-249-432-11	CARBON	18K	5%	1/4W
R1772	1-249-421-11	CARBON	2 2K	5%	1/4W
R1773	1-249-422-11	CARBON	2 7K	5%	1/4W
R1774	1-215-903-11	METAL OXIDE	68K	5%	2W F
R1775	1-249-422-11	CARBON	2 7K	5%	1/4W
R1776	1-215-903-11	METAL OXIDE	68K	5%	2W F
R1777	1-260-099-11	CARBON	1K	5%	1/2W
R1778	1-249-422-11	CARBON	2 7K	5%	1/4W
R1779	1-215-903-11	METAL OXIDE	68K	5%	2W F
R1780	1-249-436-11	CARBON	39K	5%	1/4W
R1781	1-260-099-11	CARBON	1K	5%	1/2W
R1782	1-260-099-11	CARBON	1K	5%	1/2W
R1783	1-260-087-11	CARBON	100	5%	1/2W
R1786	1-260-123-11	CARBON	100K	5%	1/2W
R1787	1-216-365-00	METAL OXIDE	0 47	5%	2W F
			(KV-35XBR48/35XBR88/37XBR48M)		
R1787	1-216-374-00	METAL OXIDE	2 7	5%	2W F
			(KV-32XBR48/34XBR48C)		
R1788	1-260-132-11	CARBON	560K	5%	1/2W

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* A-1372-350-A HX BOARD, COMPLETE
****

<CAPACITOR>

C2001	1-104-665-11	ELECT	100MF	20%	25V

<CONNECTOR>

CN2001	* 1-564-522-11	PLUG, CONNECTOR 7P			

<DIODE>

D2002	8-719-057-09	DIODE LNJ801LPDJA			
D2003	8-719-057-09	DIODE LNJ801LPDJA			

<IC>

IC2001	8-742-014-10	HYB IC SBX1981-51			

<RESISTOR>

R2001	1-216-033-00	METAL GLAZE	220	5%	1/10W
R2002	1-216-033-00	METAL GLAZE	220	5%	1/10W
R2003	1-216-017-91	METAL GLAZE	47	5%	1/10W
R2010	1-216-047-91	METAL GLAZE	820	5%	1/10W
R2011	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2012	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R2013	1-216-065-00	METAL GLAZE	4 7K	5%	1/10W
R2014	1-216-073-00	METAL GLAZE	10K	5%	1/10W

<SWITCH>

S2001	1-572-198-11	SWITCH, KEYBOARD			
S2002	1-572-198-11	SWITCH, KEYBOARD			
S2003	1-572-198-11	SWITCH, KEYBOARD			
S2004	1-572-198-11	SWITCH, KEYBOARD			
S2005	1-572-198-11	SWITCH, KEYBOARD			
S2006	1-572-198-11	SWITCH, KEYBOARD			
S2007	1-572-198-11	SWITCH, KEYBOARD			

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REF NO	PART NO	DESCRIPTION			REMARK
	* A-1372-351-A	HF BOARD, COMPLETE			
		**********			
		<CAPACITOR>			
C1234	1-126-960-11	ELECT	1MF	20%	50V
C1235	1-126-960-11	ELECT	1MF	20%	50V
		<CONNECTOR>			
CN1232	* 1-564-512-11	PLUG, CONNECTOR 9P			
		<DIODE>			
D1233	8-719-110-17	DIODE RD10ESB2			
		<JACK>			
J1231	1-565-929-11	TERMINAL BLOCK, S 3P			
		<RESISTOR>			
R1233	1-249-425-11	CARBON	4 7K	5%	1/4W
R1235	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1236	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R1237	1-216-065-00	METAL GLAZE	4 7K	5%	1/10W
R1238	1-216-113-00	METAL GLAZE	470K	5%	1/10W

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* A-1372-348-A WA BOARD, COMPLETE
****
(KV-35XBR48/35XBR88/37XBR48M)

* A-1372-352-A WA BOARD, COMPLETE
****
(KV-32XBR48/34XBR48C)

4-382-854-11 SCREW (M3X10), P, SW (+)

<CAPACITOR>

C944	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C946	1-104-665-11	ELECT	100MF	20%	25V
C949	1-161-830-00	CERAMIC	0 0047MF		500V
C950	1-126-941-11	ELECT	470MF	20%	25V
C951	1-107-637-11	ELECT	22MF	20%	160V
C952	1-104-999-11	MYLAR	0 1MF	10%	200V
C953	1-106-383-00	MYLAR	0 047MF	10%	200V
C954	1-137-364-11	FILM	0 001MF	5%	50V
C955	1-107-667-11	ELECT	2 2MF	20%	160V
C956	1-137-364-11	FILM	0 001MF	5%	50V
C957	1-106-383-00	MYLAR	0 047MF	10%	200V
C958	1-126-941-11	ELECT	470MF	20%	25V
C961	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C962	1-164-232-11	CERAMIC CHIP	0 01MF	10%	50V
C965	1-163-809-11	CERAMIC CHIP	0 047MF	10%	25V
C966	1-163-009-11	CERAMIC CHIP	0 001MF	10%	50V
C967	1-129-718-00	FILM	0 022MF	5%	630V
C968	1-137-579-11	FILM	0 068MF	5%	100V
C969	1-163-035-00	CERAMIC CHIP	0 047MF		50V
			(KV-35XBR48/35XBR88/37XBR48M)		
C981	1-126-941-11	ELECT	470MF	20%	25V
C983	1-137-366-11	FILM	0 0022MF	5%	50V
			(KV-35XBR48/35XBR88/37XBR48M)		
C1941	1-126-941-11	ELECT	470MF	20%	25V
C1948	1-164-161-11	CERAMIC CHIP	0 0022MF	10%	50V

WA K

REF. NO.	PART NO.	DESCRIPTION	REMARK
		<CONNECTOR>	
CN941	* 1-564-511-11	PLUG, CONNECTOR 8P	
CN961	* 1-770-723-11	CONNECTOR, BOARD TO BOARD 8P	
CN981	* 1-564-506-11	PLUG, CONNECTOR 3P (KV-35XBR48/35XBR88/37XBR48M)	
		<DIODE>	
D941	8-719-911-19	DIODE 1SS119-25	
D946	8-719-110-88	DIODE RD39ESB2	
D947	8-719-110-88	DIODE RD39ESB2	
D962	8-719-911-19	DIODE 1SS119-25	
D964	8-719-302-43	DIODE EL1Z	
		<IC>	
IC961	8-759-700-07	IC NJM2903M	
IC981	8-759-603-37	IC M5216P (KV-35XBR48/35XBR88/37XBR48M)	
		<COIL>	
L962	1-406-989-21	COIL, CHOKE 10mH	
L963	1-406-675-11	COIL, CHOKE 4.7mH	
		<TRANSISTOR>	
Q943	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q944	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q945	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q946	8-729-017-05	TRANSISTOR 2SA1837	
Q947	8-729-017-06	TRANSISTOR 2SC4793	
Q962	8-729-931-45	TRANSISTOR IRF614	
Q963	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q965	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q966	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q981	8-729-422-27	TRANSISTOR 2SD601A-Q (KV-35XBR48/35XBR88/37XBR48M)	
		<RESISTOR>	
R943	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R948	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R949	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R950	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R951	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R952	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R953	1-216-021-00	METAL GLAZE 68 5% 1/10W	
R954	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R955	1-216-047-91	METAL GLAZE 820 5% 1/10W	
R956	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R957	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R958	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R959	1-216-021-00	METAL GLAZE 68 5% 1/10W	
R960	1-216-689-11	METAL GLAZE 39K 5% 1/10W	
R961	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R962	1-216-057-00	METAL GLAZE 2 2K 5% 1/10W	
R963	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R964	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R965	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R966	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R967	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R968	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R969	1-216-295-91	CONDUCTOR, CHIP	
R970	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R971	1-247-895-91	CARBON 470K 5% 1/4W	
R972	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R973	1-216-121-91	METAL GLAZE 1M 5% 1/10W	
R974	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R975	1-215-885-00	METAL OXIDE 68 5% 2W F (KV-35XBR48/35XBR88/37XBR48M)	

REF. NO	PART NO.	DESCRIPTION	REMARK
R975	1-215-886-11	METAL OXIDE 100 5% 2W F (KV-32XBR48/34XBR48C)	
R976	1-215-859-00	METAL OXIDE 22 5% 1W F	
R977	1-249-401-11	CARBON 47 5% 1/4W F	
R978	1-215-885-00	METAL OXIDE 68 5% 2W F (KV-35XBR48/35XBR88/37XBR48M)	
R978	1-215-886-11	METAL OXIDE 100 5% 2W F (KV-32XBR48/34XBR48C)	
R979	1-216-017-91	METAL GLAZE 47 5% 1/10W	
R981	1-216-085-00	METAL GLAZE 33K 5% 1/10W (KV-35XBR48/35XBR88/37XBR48M)	
R982	1-216-081-00	METAL GLAZE 22K 5% 1/10W (KV-35XBR48/35XBR88/37XBR48M)	
R983	1-216-077-00	METAL GLAZE 15K 5% 1/10W (KV-35XBR48/35XBR88/37XBR48M)	
R984	1-216-069-00	METAL GLAZE 6 8K 5% 1/10W (KV-35XBR48/35XBR88/37XBR48M)	
R987	1-216-049-91	METAL GLAZE 1K 5% 1/10W (KV-35XBR48/35XBR88/37XBR48M)	
R992	1-216-073-00	METAL GLAZE 10K 5% 1/10W (KV-35XBR48/35XBR88/37XBR48M)	
R1941	1-260-312-11	CARBON 47 5% 1/2W	
R1942	1-249-387-11	CARBON 3 3 5% 1/4W F	
R1943	1-249-414-11	CARBON 560 5% 1/4W F	
R1944	1-249-432-11	CARBON 18K 5% 1/4W	
R1945	1-215-914-11	METAL OXIDE 330 5% 3W F	
R1946	1-249-417-11	CARBON 1K 5% 1/4W F	
R1947	1-249-432-11	CARBON 18K 5% 1/4W	
R1948	1-249-414-11	CARBON 560 5% 1/4W	
R1949	1-249-387-11	CARBON 3 3 5% 1/4W F	
R1950	1-249-401-11	CARBON 47 5% 1/4W F	

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* A-1380-540-A K BOARD, COMPLETE
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4-382-854-11 SCREW (M3X10), P, SW (+)

<CAPACITOR>

C1461	1-126-960-11	ELECT 1MF	20%	50V
C1462	1-126-960-11	ELECT 1MF	20%	50V
C1463	1-126-961-11	ELECT 2.2MF	20%	50V
C1464	1-104-666-11	ELECT 220MF	20%	25V
C1465	1-126-960-11	ELECT 1MF	20%	50V
C1467	1-104-664-11	ELECT 47MF	20%	25V
C1468	1-126-960-11	ELECT 1MF	20%	50V
C1470	1-104-666-11	ELECT 220MF	20%	25V
C1471	1-136-169-00	FILM 0 22MF	5%	50V
C1472	1-136-173-00	FILM 0 47MF	5%	50V
C1473	1-128-550-11	ELECT 2200MF	20%	50V
C1474	1-136-169-00	FILM 0 22MF	5%	50V
C1475	1-128-550-11	ELECT 2200MF	20%	50V
C1476	1-128-550-11	ELECT 2200MF	20%	50V

<CONNECTOR>

CN1461	* 1-564-508-11	PLUG, CONNECTOR 5P
CN1462	* 1-564-507-11	PLUG, CONNECTOR 4P
CN1463	* 1-564-508-11	PLUG, CONNECTOR 5P

<DIODE>

D1461	8-719-911-19	DIODE 1SS119-25
D1462	8-719-979-50	DIODE EGP30D

<IC>

IC1461	8-759-089-13	IC TDA7262

K UX

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ⚠ are critical for safety Replace only with part number specified

REF. NO.	PART NO	DESCRIPTION			REMARK
		<IC LINK>			
PS1461	⚠ 1-532-984-91	LINK, IC (2A/90V)			
		<TRANSISTOR>			
Q1461	8-729-422-27	TRANSISTOR 2SD601A-Q			
Q1462	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q1463	8-729-900-53	TRANSISTOR DTC114EK			
Q1464	8-729-900-53	TRANSISTOR DTC114EK			
		<RESISTOR>			
R1461	1-216-065-00	METAL GLAZE 4.7K	5%	1/10W	
R1462	1-216-073-00	METAL GLAZE 10K	5%	1/10W	
R1464	1-216-065-00	METAL GLAZE 4.7K	5%	1/10W	
R1465	1-216-065-00	METAL GLAZE 4 7K	5%	1/10W	
R1466	1-216-089-91	METAL GLAZE 47K	5%	1/10W	
R1467	1-216-073-00	METAL GLAZE 10K	5%	1/10W	
R1469	1-249-385-11	CARBON 2.2	5%	1/4W	F
R1470	1-249-385-11	CARBON 2 2	5%	1/4W	F
R1471	1-216-089-91	METAL GLAZE 47K	5%	1/10W	
R1472	1-216-041-00	METAL GLAZE 470	5%	1/10W	
R1473	1-216-113-00	METAL GLAZE 470K	5%	1/10W	
R1474	1-216-077-00	METAL GLAZE 15K	5%	1/10W	
R1475	1-216-077-00	METAL GLAZE 15K	5%	1/10W	
R1476	1-247-791-91	CARBON 22	5%	1/4W	
R1477	1-249-419-11	CARBON 1 5K	5%	1/4W	F
R1478	1-247-791-91	CARBON 22	5%	1/4W	
R1479	1-249-419-11	CARBON 1 5K	5%	1/4W	F
R1480	1-249-421-11	CARBON 2 2K	5%	1/4W	
R1481	1-249-421-11	CARBON 2 2K	5%	1/4W	
R1482	1-216-073-00	METAL GLAZE 10K	5%	1/10W	
R1483	1-216-073-00	METAL GLAZE 10K	5%	1/10W	

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* A-1394-860-A UX BOARD, COMPLETE
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		<CAPACITOR>			
C151	1-126-960-11	ELECT 1MF	20%	50V	
C152	1-126-960-11	ELECT 1MF	20%	50V	
C153	1-164-222-11	CERAMIC CHIP 0.22MF		25V	
C154	1-164-222-11	CERAMIC CHIP 0.22MF		25V	
C156	1-163-809-11	CERAMIC CHIP 0 047MF	10%	25V	
C158	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V	
C159	1-163-017-00	CERAMIC CHIP 0 0047MF	10%	50V	
C160	1-126-959-11	ELECT 0 47MF	20%	50V	
C161	1-126-960-11	ELECT 1MF	20%	50V	
C162	1-126-960-11	ELECT 1MF	20%	50V	
C164	1-163-038-91	CERAMIC CHIP 0 1MF		25V	
C166	1-163-038-91	CERAMIC CHIP 0.1MF		25V	
C167	1-104-665-11	ELECT 100MF	20%	25V	
C168	1-104-666-11	ELECT 220MF	20%	25V	
C173	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V	
C174	1-164-005-11	CERAMIC CHIP 0 47MF		25V	
C201	1-128-551-11	ELECT 22MF	20%	25V	
C202	1-128-551-11	ELECT 22MF	20%	25V	
C203	1-128-551-11	ELECT 22MF	20%	25V	
C204	1-126-960-11	ELECT 1MF	20%	50V	
C205	1-126-960-11	ELECT 1MF	20%	50V	
C231	1-164-232-11	CERAMIC CHIP 0 01MF	10%	50V	
C232	1-128-551-11	ELECT 22MF	20%	25V	
C233	1-128-551-11	ELECT 22MF	20%	25V	
C234	1-126-960-11	ELECT 1MF	20%	50V	
C235	1-126-960-11	ELECT 1MF	20%	50V	
C236	1-128-551-11	ELECT 22MF	20%	25V	
C237	1-126-960-11	ELECT 1MF	20%	50V	
C238	1-126-960-11	ELECT 1MF	20%	50V	
C241	1-126-941-11	ELECT 470MF	20%	25V	
C242	1-126-959-11	ELECT 0.47MF	20%	50V	
C243	1-126-959-11	ELECT 0.47MF	20%	50V	
C244	1-126-959-11	ELECT 0 47MF	20%	50V	
C245	1-126-959-11	ELECT 0.47MF	20%	50V	
C247	1-126-941-11	ELECT 470MF	20%	25V	
C248	1-126-959-11	ELECT 0 47MF	20%	50V	
C249	1-126-959-11	ELECT 0 47MF	20%	50V	
C272	1-163-231-11	CERAMIC CHIP 15PF	5%	50V	
C273	1-128-551-11	ELECT 22MF	20%	25V	
C277	1-128-551-11	ELECT 22MF	20%	25V	
C278	1-128-551-11	ELECT 22MF	20%	25V	
C279	1-164-232-11	CERAMIC CHIP 0 01MF	10%	50V	
C281	1-128-551-11	ELECT 22MF	20%	25V	
C283	1-126-941-11	ELECT 470MF	20%	25V	
C284	1-126-941-11	ELECT 470MF	20%	25V	
C1051	1-126-964-11	ELECT 10MF	20%	50V	
C1053	1-104-665-11	ELECT 100MF	20%	25V	
C1151	1-164-346-11	CERAMIC CHIP 1MF		16V	
C1152	1-163-038-91	CERAMIC CHIP 0.1MF		25V	
C1153	1-164-346-11	CERAMIC CHIP 1MF		16V	
C1155	1-126-941-11	ELECT 470MF	20%	25V	
C1156	1-163-038-91	CERAMIC CHIP 0.1MF		25V	
C1157	1-104-664-11	ELECT 47MF	20%	25V	
C1158	1-163-038-91	CERAMIC CHIP 0 1MF		25V	
C1159	1-163-038-91	CERAMIC CHIP 0.1MF		25V	
C1402	1-126-964-11	ELECT 10MF	20%	50V	
C1404	1-163-038-91	CERAMIC CHIP 0 1MF		25V	
C1405	1-163-038-91	CERAMIC CHIP 0.1MF		25V	
C1406	1-163-038-91	CERAMIC CHIP 0.1MF		25V	
C1407	1-163-038-91	CERAMIC CHIP 0.1MF		25V	
C1408	1-164-161-11	CERAMIC CHIP 0.0022MF	10%	50V	
C1409	1-164-161-11	CERAMIC CHIP 0 0022MF	10%	50V	
C1410	1-164-161-11	CERAMIC CHIP 0 0022MF	10%	50V	
C1411	1-164-161-11	CERAMIC CHIP 0.0022MF	10%	50V	
C1414	1-164-222-11	CERAMIC CHIP 0 22MF		25V	
C1415	1-126-965-11	ELECT 22MF	20%	50V	
C1416	1-104-665-11	ELECT 100MF	20%	25V	
C1420	1-164-005-11	CERAMIC CHIP 0.47MF		25V	
C1421	1-126-961-11	ELECT 2 2MF	20%	50V	
C1422	1-126-961-11	ELECT 2 2MF	20%	50V	
C2201	1-126-965-11	ELECT 22MF	20%	50V	
C2202	1-126-965-11	ELECT 22MF	20%	50V	
C2203	1-164-232-11	CERAMIC CHIP 0 01MF	10%	50V	
		<CONNECTOR>			
CN261	1-573-300-21	CONNECTOR, BOARD TO BOARD 18P			
CN262	1-573-301-21	CONNECTOR, BOARD TO BOARD 20P			
CN264	* 1-691-914-11	CONNECTOR, BOARD TO BOARD 15P			
CN1401	* 1-564-508-11	PLUG, CONNECTOR 5P			
		<DIODE>			
D151	8-719-404-49	DIODE MA111			
D152	8-719-404-49	DIODE MA111			
D154	8-719-404-49	DIODE MA111			
D201	8-719-032-47	DIODE MTZJ-T-9110			
D202	8-719-032-47	DIODE MTZJ-T-9110			
D203	8-719-032-47	DIODE MTZJ-T-9110			
D204	8-719-032-47	DIODE MTZJ-T-9110			
D205	8-719-032-47	DIODE MTZJ-T-9110			
D231	8-719-032-47	DIODE MTZJ-T-9110			
D232	8-719-032-47	DIODE MTZJ-T-9110			
D233	8-719-032-47	DIODE MTZJ-T-9110			
D234	8-719-032-47	DIODE MTZJ-T-9110			

REF NO	PART NO	DESCRIPTION	REMARK
D235	8-719-032-47	DIODE MTZJ-T-9110	
D236	8-719-032-47	DIODE MTZJ-T-9110	
D237	8-719-032-47	DIODE MTZJ-T-9110	
D238	8-719-032-47	DIODE MTZJ-T-9110	
D239	8-719-032-47	DIODE MTZJ-T-9110	
D245	8-719-157-94	DIODE RD3 3SB	
D246	8-719-157-94	DIODE RD3 3SB	
D247	8-719-157-94	DIODE RD3 3SB	
D248	8-719-157-94	DIODE RD3 3SB	
D249	8-719-157-94	DIODE RD3 3SB	
D250	8-719-157-94	DIODE RD3 3SB	
D261	8-719-032-47	DIODE MTZJ-T-9110	
D902	8-719-032-47	DIODE MTZJ-T-9110	
D910	8-719-032-47	DIODE MTZJ-T-9110	
D911	8-719-032-47	DIODE MTZJ-T-9110	
D912	8-719-032-47	DIODE MTZJ-T-9110	
D1051	8-719-404-49	DIODE MA111	
D1052	8-719-404-49	DIODE MA111	
D2201	8-719-032-47	DIODE MTZJ-T-9110	
D2202	8-719-032-47	DIODE MTZJ-T-9110	
D2203	8-719-032-47	DIODE MTZJ-T-9110	
		<IC>	
IC151	8-759-700-44	IC NJM2902M	
IC152	8-759-700-44	IC NJM2902M	
IC153	8-759-700-44	IC NJM2902M	
IC154	8-759-009-06	IC MC14052BF	
IC155	8-759-700-44	IC NJM2902M	
IC156	8-759-700-44	IC NJM2902M	
IC157	8-759-009-06	IC MC14052BF	
IC261	8-752-066-69	IC CXA1845Q	
IC1051	8-752-058-68	IC CXA1315M	
IC1401	8-759-369-39	IC BH3856FS-E2	
IC1402	8-759-100-96	IC uPC4558G2	
		<JACK>	
J231	1-750-515-11	TERMINAL BLOCK, S 3P	
J232	1-750-517-11	JACK BLOCK, PIN 3P	
J233	1-750-516-11	JACK BLOCK, PIN 2P	
J234	1-750-517-11	JACK BLOCK, PIN 3P	
J235	1-750-517-11	JACK BLOCK, PIN 3P	
J236	1-774-358-11	JACK BLOCK, PIN	
J902	1-764-143-11	JACK 3P	
J903	1-764-143-11	JACK 3P	
J904	1-764-143-11	JACK 3P	
J905	1-764-143-11	JACK 3P	
		<COIL>	
L261	1-410-482-31	INDUCTOR 100UH	
		<TRANSISTOR>	
Q202	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q203	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q205	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q206	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q208	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q209	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q210	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q211	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q212	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q231	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q233	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q234	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q235	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q236	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q237	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q238	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q239	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q240	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q241	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q242	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q243	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q244	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q245	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q246	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q262	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q263	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q264	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q265	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q266	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q267	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q268	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q1051	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
		<RESISTOR>	
R151	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R152	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R153	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R154	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R155	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R156	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R157	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
R158	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R159	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R160	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
R161	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R162	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R163	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R164	1-216-065-00	METAL GLAZE 4 7K 5% 1/10W	
R165	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R167	1-216-091-00	METAL GLAZE 56K 5% 1/10W	
R168	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R169	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R170	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R171	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R172	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R173	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R174	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R175	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R176	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R178	1-216-091-00	METAL GLAZE 56K 5% 1/10W	
R179	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R180	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R181	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R183	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R184	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R185	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R186	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R187	1-216-099-00	METAL GLAZE 120K 5% 1/10W	
R188	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R189	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R190	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R191	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R192	1-216-063-91	METAL GLAZE 3 9K 5% 1/10W	
R193	1-216-099-00	METAL GLAZE 120K 5% 1/10W	
R194	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R195	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R196	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R197	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R198	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R199	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R200	1-216-081-00	METAL GLAZE 22K 5% 1/10W	

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REF. NO.	PART NO	DESCRIPTION		REMARK
R201	1-216-022-00	METAL GLAZE 75	5%	1/10W
R202	1-216-022-00	METAL GLAZE 75	5%	1/10W
R203	1-216-022-00	METAL GLAZE 75	5%	1/10W
R204	1-216-113-00	METAL GLAZE 470K	5%	1/10W
R205	1-216-113-00	METAL GLAZE 470K	5%	1/10W
R206	1-216-295-91	CONDUCTOR, CHIP		
R207	1-216-295-91	CONDUCTOR, CHIP		
R208	1-216-295-91	CONDUCTOR, CHIP		
R211	1-216-089-91	METAL GLAZE 47K	5%	1/10W
R212	1-216-081-00	METAL GLAZE 22K	5%	1/10W
R213	1-216-089-91	METAL GLAZE 47K	5%	1/10W
R214	1-216-081-00	METAL GLAZE 22K	5%	1/10W
R218	1-208-774-11	METAL GLAZE 470	0 50%	1/10W
R219	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R220	1-208-776-11	METAL GLAZE 560	0.50%	1/10W
R221	1-208-774-11	METAL GLAZE 470	0.50%	1/10W
R222	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R223	1-208-776-11	METAL GLAZE 560	0.50%	1/10W
R225	1-216-025-91	METAL GLAZE 100	5%	1/10W
R226	1-216-025-91	METAL GLAZE 100	5%	1/10W
R228	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R229	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R230	1-216-089-91	METAL GLAZE 47K	5%	1/10W
R231	1-216-022-00	METAL GLAZE 75	5%	1/10W
R232	1-216-022-00	METAL GLAZE 75	5%	1/10W
R233	1-216-065-00	METAL GLAZE 4.7K	5%	1/10W
R234	1-216-022-00	METAL GLAZE 75	5%	1/10W
R235	1-216-113-00	METAL GLAZE 470K	5%	1/10W
R236	1-216-113-00	METAL GLAZE 470K	5%	1/10W
R237	1-216-022-00	METAL GLAZE 75	5%	1/10W
R238	1-216-113-00	METAL GLAZE 470K	5%	1/10W
R239	1-216-113-00	METAL GLAZE 470K	5%	1/10W
R240	1-216-097-91	METAL GLAZE 100K	5%	1/10W
R241	1-216-113-00	METAL GLAZE 470K	5%	1/10W
R242	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R243	1-216-113-00	METAL GLAZE 470K	5%	1/10W
R244	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R245	1-216-022-00	METAL GLAZE 75	5%	1/10W
R246	1-216-113-00	METAL GLAZE 470K	5%	1/10W
R247	1-216-113-00	METAL GLAZE 470K	5%	1/10W
R248	1-216-113-00	METAL GLAZE 470K	5%	1/10W
R249	1-216-065-00	METAL GLAZE 4 7K	5%	1/10W
R250	1-216-065-00	METAL GLAZE 4.7K	5%	1/10W
R251	1-216-065-00	METAL GLAZE 4 7K	5%	1/10W
R252	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R254	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R256	1-216-295-91	CONDUCTOR, CHIP		
R257	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R258	1-216-065-00	METAL GLAZE 4 7K	5%	1/10W
R259	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R260	1-216-065-00	METAL GLAZE 4 7K	5%	1/10W
R261	1-216-025-91	METAL GLAZE 100	5%	1/10W
R262	1-216-067-00	METAL GLAZE 5 6K	5%	1/10W
R263	1-216-025-91	METAL GLAZE 100	5%	1/10W
R264	1-216-067-00	METAL GLAZE 5 6K	5%	1/10W
R265	1-216-025-91	METAL GLAZE 100	5%	1/10W
R266	1-216-025-91	METAL GLAZE 100	5%	1/10W
R267	1-216-025-91	METAL GLAZE 100	5%	1/10W
R268	1-216-067-00	METAL GLAZE 5 6K	5%	1/10W
R269	1-216-067-00	METAL GLAZE 5 6K	5%	1/10W
R270	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R271	1-216-067-00	METAL GLAZE 5 6K	5%	1/10W
R272	1-216-025-91	METAL GLAZE 100	5%	1/10W
R273	1-216-067-00	METAL GLAZE 5 6K	5%	1/10W
R274	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R275	1-216-025-91	METAL GLAZE 100	5%	1/10W
R276	1-216-295-91	CONDUCTOR, CHIP		
R278	1-216-067-00	METAL GLAZE 5 6K	5%	1/10W

REF NO	PART NO	DESCRIPTION		REMARK
R279	1-216-025-91	METAL GLAZE 100	5%	1/10W
R280	1-216-067-00	METAL GLAZE 5 6K	5%	1/10W
R281	1-216-025-91	METAL GLAZE 100	5%	1/10W
R282	1-216-025-91	METAL GLAZE 100	5%	1/10W
R283	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R284	1-216-033-00	METAL GLAZE 220	5%	1/10W
R285	1-216-033-00	METAL GLAZE 220	5%	1/10W
R286	1-216-067-00	METAL GLAZE 5.6K	5%	1/10W
R287	1-216-025-91	METAL GLAZE 100	5%	1/10W
R288	1-216-067-00	METAL GLAZE 5 6K	5%	1/10W
R289	1-216-067-00	METAL GLAZE 5 6K	5%	1/10W
R290	1-216-025-91	METAL GLAZE 100	5%	1/10W
R291	1-216-067-00	METAL GLAZE 5 6K	5%	1/10W
R292	1-216-025-91	METAL GLAZE 100	5%	1/10W
R293	1-216-025-91	METAL GLAZE 100	5%	1/10W
R294	1-216-077-00	METAL GLAZE 15K	5%	1/10W
R295	1-216-025-91	METAL GLAZE 100	5%	1/10W
R296	1-216-025-91	METAL GLAZE 100	5%	1/10W
R297	1-216-025-91	METAL GLAZE 100	5%	1/10W
R298	1-216-025-91	METAL GLAZE 100	5%	1/10W
R300	1-216-025-91	METAL GLAZE 100	5%	1/10W
R902	1-249-405-11	CARBON 100	5%	1/4W F
R919	1-216-295-91	CONDUCTOR, CHIP		
R921	1-249-405-11	CARBON 100	5%	1/4W F
R923	1-249-405-11	CARBON 100	5%	1/4W F
R925	1-249-405-11	CARBON 100	5%	1/4W F
R926	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1051	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R1052	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R1053	1-216-025-91	METAL GLAZE 100	5%	1/10W
R1054	1-216-025-91	METAL GLAZE 100	5%	1/10W
R1055	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R1056	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R1057	1-216-025-91	METAL GLAZE 100	5%	1/10W
R1058	1-216-025-91	METAL GLAZE 100	5%	1/10W
R1059	1-216-065-00	METAL GLAZE 4 7K	5%	1/10W
R1060	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R1062	1-216-025-91	METAL GLAZE 100	5%	1/10W
R1063	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R1064	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R1065	1-216-025-91	METAL GLAZE 100	5%	1/10W
R1151	1-216-053-00	METAL GLAZE 1 5K	5%	1/10W
R1152	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1153	1-216-097-91	METAL GLAZE 100K	5%	1/10W
R1154	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1156	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R1157	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R1158	1-216-065-00	METAL GLAZE 4.7K	5%	1/10W
R1159	1-216-065-00	METAL GLAZE 4 7K	5%	1/10W
R1160	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1161	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1162	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1163	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1164	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1165	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1166	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1167	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1168	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1169	1-216-081-00	METAL GLAZE 22K	5%	1/10W
R1170	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R1171	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R1172	1-216-097-91	METAL GLAZE 100K	5%	1/10W
R1173	1-216-081-00	METAL GLAZE 22K	5%	1/10W
R1174	1-216-081-00	METAL GLAZE 22K	5%	1/10W
R1175	1-216-081-00	METAL GLAZE 22K	5%	1/10W
R1176	1-216-081-00	METAL GLAZE 22K	5%	1/10W
R1177	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1178	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1179	1-216-081-00	METAL GLAZE 22K	5%	1/10W

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite
Ne les remplacer que par une piece portant le numero specifie

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REF. NO.	PART NO	DESCRIPTION		REMARK
R1180	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R1181	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R1182	1-216-081-00	METAL GLAZE 22K	5%	1/10W
R1183	1-216-097-91	METAL GLAZE 100K	5%	1/10W
R1184	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R1185	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R1186	1-216-065-00	METAL GLAZE 4.7K	5%	1/10W
R1187	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R1188	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R1189	1-216-057-00	METAL GLAZE 2.2K	5%	1/10W
R1190	1-216-081-00	METAL GLAZE 22K	5%	1/10W
R1191	1-216-017-91	METAL GLAZE 47	5%	1/10W
R1192	1-216-017-91	METAL GLAZE 47	5%	1/10W
R1193	1-216-099-00	METAL GLAZE 120K	5%	1/10W
R1194	1-208-291-11	METAL GLAZE 4 7M	5%	1/10W
R1195	1-216-089-91	METAL GLAZE 47K	5%	1/10W
R1196	1-208-291-11	METAL GLAZE 4.7M	5%	1/10W
R1197	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R1198	1-216-063-91	METAL GLAZE 3 9K	5%	1/10W
R1199	1-216-097-91	METAL GLAZE 100K	5%	1/10W
R1200	1-216-097-91	METAL GLAZE 100K	5%	1/10W
R1201	1-216-089-91	METAL GLAZE 47K	5%	1/10W
R1202	1-216-053-00	METAL GLAZE 1 5K	5%	1/10W
R1203	1-216-089-91	METAL GLAZE 47K	5%	1/10W
R1204	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1205	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1207	1-216-025-91	METAL GLAZE 100	5%	1/10W
R1208	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1209	1-216-295-91	CONDUCTOR, CHIP		
R1211	1-216-089-91	METAL GLAZE 47K	5%	1/10W
R1212	1-216-081-00	METAL GLAZE 22K	5%	1/10W
R1213	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1214	1-208-774-11	METAL GLAZE 470	0 50%	1/10W
R1215	1-208-776-11	METAL GLAZE 560	0.50%	1/10W
R1216	1-216-025-91	METAL GLAZE 100	5%	1/10W
R1217	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1242	1-216-065-00	METAL GLAZE 4 7K	5%	1/10W
R1243	1-216-065-00	METAL GLAZE 4 7K	5%	1/10W
R1244	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1245	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1246	1-216-022-00	METAL GLAZE 75	5%	1/10W
R1247	1-216-113-00	METAL GLAZE 470K	5%	1/10W
R1248	1-216-113-00	METAL GLAZE 470K	5%	1/10W
R1249	1-216-113-00	METAL GLAZE 470K	5%	1/10W
R1250	1-216-065-00	METAL GLAZE 4 7K	5%	1/10W
R1251	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1252	1-216-065-00	METAL GLAZE 4 7K	5%	1/10W
R1254	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1255	1-216-065-00	METAL GLAZE 4.7K	5%	1/10W
R1256	1-216-065-00	METAL GLAZE 4 7K	5%	1/10W
R1257	1-216-065-00	METAL GLAZE 4 7K	5%	1/10W
R1258	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1259	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1260	1-216-295-91	CONDUCTOR, CHIP		
R1261	1-208-774-11	METAL GLAZE 470	0 50%	1/10W
R1262	1-208-776-11	METAL GLAZE 560	0.50%	1/10W
R1263	1-216-295-91	CONDUCTOR, CHIP		
R1264	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1265	1-216-025-91	METAL GLAZE 100	5%	1/10W
R1266	1-216-041-00	METAL GLAZE 470	5%	1/10W
R1267	1-216-025-91	METAL GLAZE 100	5%	1/10W
R1268	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1269	1-216-041-00	METAL GLAZE 470	5%	1/10W
R1270	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1271	1-216-025-91	METAL GLAZE 100	5%	1/10W
R1272	1-208-774-11	METAL GLAZE 470	0 50%	1/10W
R1273	1-208-777-11	METAL GLAZE 620	0.50%	1/10W
R1274	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1275	1-216-097-91	METAL GLAZE 100K	5%	1/10W
R1276	1-216-041-00	METAL GLAZE 470	5%	1/10W
R1277	1-216-025-91	METAL GLAZE 100	5%	1/10W
R1278	1-216-025-91	METAL GLAZE 100	5%	1/10W
R1279	1-216-025-91	METAL GLAZE 100	5%	1/10W
R1280	1-216-025-91	METAL GLAZE 100	5%	1/10W
R1281	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1282	1-216-025-91	METAL GLAZE 100	5%	1/10W
R1283	1-216-295-91	CONDUCTOR, CHIP		
R1284	1-216-295-91	CONDUCTOR, CHIP		
R1286	1-216-295-91	CONDUCTOR, CHIP		
R1287	1-216-295-91	CONDUCTOR, CHIP		
R1288	1-216-295-91	CONDUCTOR, CHIP		
R1289	1-216-295-91	CONDUCTOR, CHIP		
R1290	1-216-295-91	CONDUCTOR, CHIP		
R1291	1-216-295-91	CONDUCTOR, CHIP		
R1292	1-216-295-91	CONDUCTOR, CHIP		
R1293	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1294	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1295	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1296	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1297	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1298	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1299	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1300	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R1401	1-216-295-91	CONDUCTOR, CHIP		
R1406	1-216-295-91	CONDUCTOR, CHIP		
R1407	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R1408	1-216-025-91	METAL GLAZE 100	5%	1/10W
R1409	1-216-025-91	METAL GLAZE 100	5%	1/10W
R1411	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R1412	1-216-093-00	METAL GLAZE 68K	5%	1/10W
R1414	1-216-081-00	METAL GLAZE 22K	5%	1/10W
R1415	1-216-025-91	METAL GLAZE 100	5%	1/10W
R1418	1-216-093-00	METAL GLAZE 68K	5%	1/10W
R1419	1-216-081-00	METAL GLAZE 22K	5%	1/10W
R1421	1-216-025-91	METAL GLAZE 100	5%	1/10W
R1424	1-216-025-91	METAL GLAZE 100	5%	1/10W
R1425	1-216-025-91	METAL GLAZE 100	5%	1/10W
R2201	1-216-022-00	METAL GLAZE 75	5%	1/10W
R2202	1-216-022-00	METAL GLAZE 75	5%	1/10W
R2203	1-216-022-00	METAL GLAZE 75	5%	1/10W

****

* A-1241-293-A FA BOARD, COMPLETE (KV-35XBR88)
****

<CONNECTOR>

CN1601 1-691-960-11 PIN, CONNECTOR (PC BOARD) 3P
CN1602 * 1-580-843-11 PIN, CONNECTOR (POWER)
CN1603 ⚠ 1-540-062-11 OUTLET, AC (POLAR)

<FUSE>

F1601 ⚠ 1-576-107-12 FUSE
1-533-223-11 HOLDER, FUSE , F1601
F1602 ⚠ 1-576-193-11 FUSE
1-533-223-11 HOLDER, FUSE , F1602

<VARISTOR>

VDR1601 1-801-074-41 VARISTOR ERZV10D271

****

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie

The componants identified by shading and mark ⚠ are critical for safety Replace only with part number specified

FB

REF. NO.	PART NO	DESCRIPTION	REMARK
	* A-1241-294-A	FB BOARD, COMPLETE (KV-35XBR88) **********	
		<CAPACITOR>	
C1621	1-126-943-11	ELECT 2200MF 20% 25V	
		<CONNECTOR>	
CN1621	1-764-101-11	PIN, CONNECTOR (PC BOARD) 2P	
CN1622	* 1-564-506-11	PLUG, CONNECTOR 3P	
		<DIODE>	
D1621	8-719-510-02	DIODE D1NS4-TA	
D1622	8-719-510-02	DIODE D1NS4-TA	
D1623	8-719-510-02	DIODE D1NS4-TA	
D1624	8-719-510-02	DIODE D1NS4-TA	
		<RESISTOR>	
R1621	1-216-371-00	METAL OXIDE 1 5 5% 2W F	
R1622	1-202-933-61	FUSIBLE 0 1 10% 1/2W F	
		**********	
		MISCELLANEOUS **********	
	⚠ 1-402-952-12	COIL, DEMAGNETIZATION (KV-32XBR48)	
	⚠ 1-411-474-11	COIL, DEMAGNETIZATION (KV-34XBR48C)	
	⚠ 1-411-881-12	COIL, DEMAGNETIC (KV-35XBR48/35XBR88/37XBR48M)	
	⚠ 1-411-882-12	COIL, DEMAGNETIC (KV-35XBR48/35XBR88/37XBR48M)	
	1-431-520-11	TRANSFORMER, POWER (KV-35XBR88)	
	1-452-885-11	MAGNET, LANDING (KV-32XBR48/34XBR48C)	
	1-475-319-11	DOOR UNIT, AUTO (KV-35XBR88)	
	1-505-684-11	SPEAKER UNIT, BOX TYPE (KV-35XBR48/35XBR88/37XBR48M)	
	1-505-721-11	BOX TYPE, SPEAKER UNIT (KV-32XBR48/34XBR48C)	
	* 1-556-945-21	CABLE, P-P	
	* 1-557-056-31	CABLE, P-P	
	⚠ 1-751-059-11	CORD, POWER (WITH CONNECTOR) 10A/125V (except KV-34XBR48C)	
	⚠ 1-769-796-41	CORD, POWER (WITH CONNECTOR) (KV-34XBR48C)	
	1-900-800-81	WIRE ASSY, G2 LEAD	
	1-900-800-82	WIRE ASSY, FOCUS	
	⚠ 8-451-480-11	DEFLECTION YOKE Y37GXA-X (KV-35XBR48/35XBR88/37XBR48M)	
	⚠ 8-451-482-21	DEFLECTION YOKE Y34FXA2-X (KV-32XBR48/34XBR48C)	
	⚠ 8-453-007-21	NA324-M2	
	8-598-414-00	ANTENNA SWITCH AS-2F	
	⚠ 8-733-745-05	PICTURE TUBE 34FXD2(SDP) (XBR) (M80JYV51X) (KV-32XBR48)	
	⚠ 8-733-746-05	PICTURE TUBE 34FXD2 (SDP) (FOR XBR/10UT) (M80JYV51X) (KV-34XBR48C)	
	⚠ 8-733-760-05	PICTURE TUBE 37GX (A89LJT80X) (KV-35XBR48/35XBR88/37XBR48M)	
		**********	

REF. NO.	PART NO	DESCRIPTION	REMARK
		ACCESSORIES AND PACKING MATERIALS **********	
	3-860-371-21	MANUAL, INSTRUCTION (except KV-34XBR48C)	
	3-860-371-31	MANUAL, INSTRUCTION (KV-32XBR48(CND)/35XBR48(CND))	
	3-860-371-41	MANUAL, INSTRUCTION (except KV-32XBR48(CND)/35XBR48(CND))	
	* 4-041-423-01	SHEET, PROTECTION (KV-35XBR88)	
	* 4-041-425-01	BAG, PROTECTION (KV-35XBR88)	
	* 4-049-758-11	BAG, PROTECTION (KV-32XBR48/34XBR48C)	
	* 4-053-658-01	BAG, PROTECTION (KV-35XBR48/37XBR48M)	
	* 4-058-409-01	CUSHION (UPPER) (ASSY) (KV-35XBR48/37XBR48M)	
	* 4-058-410-01	CUSHION (LOWER) (ASSY) (KV-35XBR48/37XBR48M)	
	* 4-058-415-01	INDIVIDUAL CARTON (KV-35XBR48/37XBR48M)	
	* 4-058-482-01	INDIVIDUAL CARTON (KV-32XBR48/34XBR48C)	
	* 4-058-483-01	CUSHION (UPPER)(ASSY) (KV-32XBR48/34XBR48C)	
	* 4-058-484-01	CUSHION (LOWER)(ASSY) (KV-32XBR48/34XBR48C)	
	* 4-059-759-01	CUSHION (UPPER)(ASSY) (KV-35XBR88)	
	* 4-059-760-01	CUSHION (LOWER)(ASSY)(KV-35XBR88)	
	* 4-059-765-01	INDIVIDUAL CARTON (KV-35XBR88)	
	* 4-059-766-01	TRAY (KV-35XBR88)	
	* 4-059-767-01	BOARD, BOTTOM (KV-35XBR88)	
	* 4-059-768-01	BOARD, TOP (KV-35XBR88)	
	* 4-059-769-01	CUSHION (FRONT) (KV-35XBR88)	
	* 4-059-770-01	SHEET, CORRUGATED FIBER BOARD (KV-35XBR88)	
	4-060-839-01	CARD, CUSTOMER INQUIRY (KV-32XBR48(US)/35XBR48(US))	
		REMOTE COMMANDER **********	
	1-475-306-11	REMOTE COMMANDER (RM-Y144)	
	3-709-129-01	POCKET, COVER (FOR RM-Y144)	

Sony Corporation
Display Company
Quality Assurance Department
Service Promotion Section

9-965-836-01

English
97HR02397-1
Printed in JAPAN

SONY
SERVICE MANUAL

AA-2C CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-32XBR48	RM-Y144	US	SCC-N29B-A
KV-32XBR48	RM-Y144	Canadian	SCC-N30B-A
KV-34XBR48C	RM-Y144	E	SCC-N31B-A
KV-35XBR48	RM-Y144	US	SCC-N29A-A
KV-35XBR48	RM-Y144	Canadian	SCC-N30A-A
KV-35XBR88	RM-Y144	US	SCC-N29C-A
KV-37XBR48M	RM-Y144	E	SCC-N31A-A

CORRECTION-1

File this correction with the Service manual.

☛ : Indicates corrected portion

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MICROFILM

※ Please file according to model size. .....

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SPECIFICATIONS (See page 2)

	KV-32XBR48	KV-34XBR48C	KV-35XBR48	KV-35XBR88	KV-37XBR48M
Power requirements	120 V, 60 Hz	220 V, 50/60 Hz	120 V, 60 Hz	120 V, 60 Hz	120 V, 60 Hz
Number of inputs / outputs					
Video [1]	3	3	3	3	3
S video[2]	2	2	2	2	2
Audio[3]	4	4	4	4	4
Audio out[4]	1	1	1	1	1
Monitor out[1]	1	1	1	1	1
TV out[1]	1	1	1	1	1
S-Link	•	•	•	•	•
Y, B-Y, R-Y[5]	1	1	1	1	1
Speaker output (W)	15W x 2	15W x 2	15W x 2	15W x 2	15W x 2
Power consumption (W)					
in use (Max.)	195W	195W	198W	198W	198W
in standby	15W	17W	15W	15W	15W
Dimensions (W/H/D)	864 x 656 x	864 x 656 x	936 x 706.5 x	936 x 1201.5 x	936 x 706.5 x
(mm)	606 mm	606 mm	629 mm	699.5 mm	629 mm
(in.)	34 1/16 x 25 7/8 x 23 7/8 in.	34 1/16 x 25 7/8 x 23 7/8 in.	36 7/8 x 27 7/8 x 24 25/32 in.	36 7/8 47 3/8 x 27 9/16 in.	36 7/8 x 27 7/8 x 24 25/32 in.
Mass (kg)	72 kg	72 kg	90 kg	125 kg	90 kg
(lbs)	158 lbs 12 oz	158 lbs 12 oz	198 lbs 7 oz	276 lbs 0 oz	198 lbs 7 oz

[1] 1 Vp-p, 75 ohms unbalanced, sync negative

[2] Y : 1 Vp-p, 75 ohms unbalanced, sync negative
C : 0.286 Vp-p (Burst signal), 75 ohms

[3] 500 mVrms (100% modulation), Impedance : 47 kilohms

[4] More than 408 mVrms at the maximum volume setting (variable)
More than 408 mVrms (fix)
Impedance : 50 kilohms

[5] Y : 1.0 Vp-p, 75 ohms, sync negative
B-Y : 0.7 Vp-p, 75 ohms
R-Y : 0.7 Vp-p, 75 ohms

Television system
American TV standard

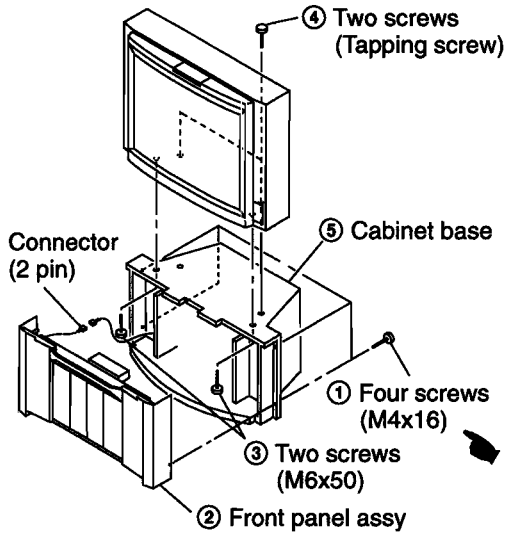
Channel coverage
VHF : 2-13 / UHF : 14-69 / CATV : 1-125

Picture tube
Hi Black Trinitron® tube

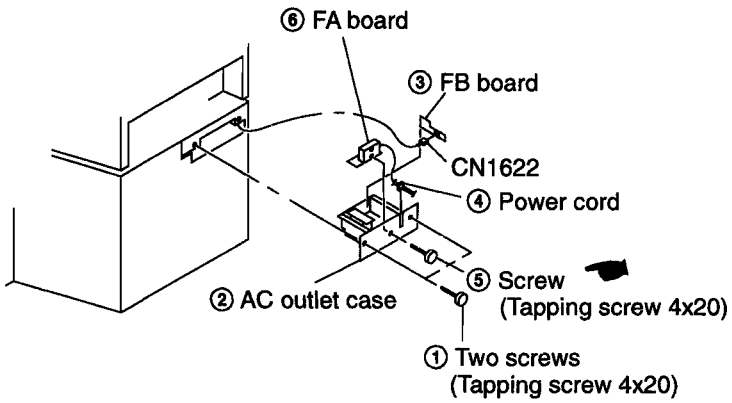
Antenna
75 ohm external terminal for VHF / UHF

SECTION 2. DISASSEMBLY

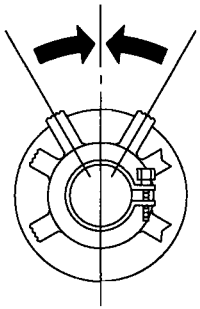
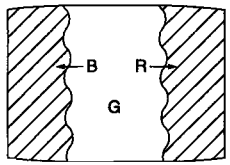
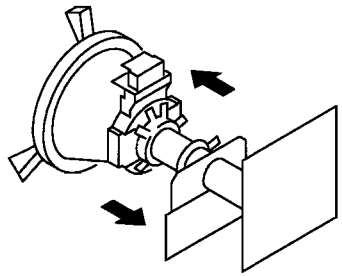
2-2-1. CABINET BASE REMOVAL (KV-35XBR88) (See page 22)

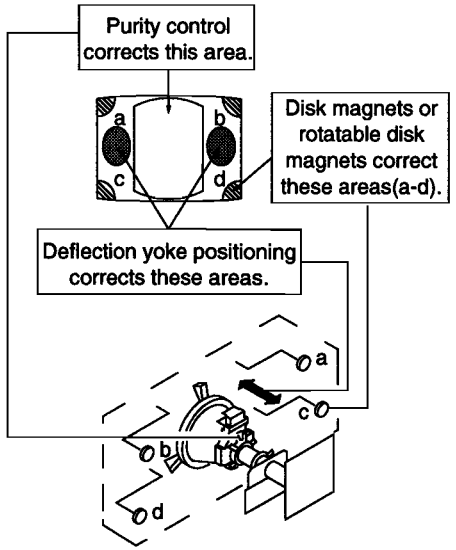


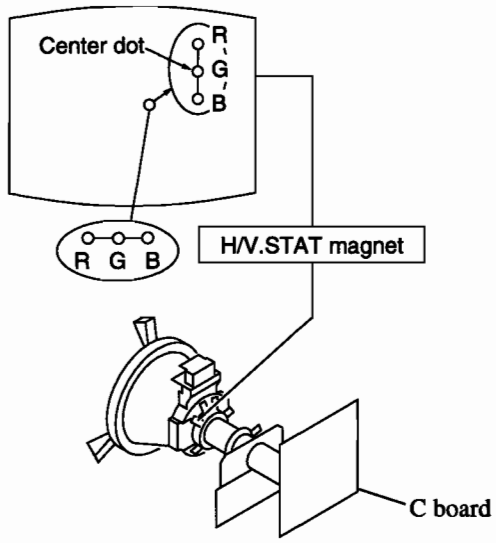
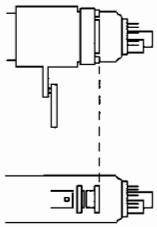
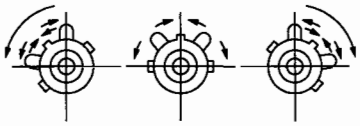
2-2-2. FA AND FB BOARDS REMOVAL (KV-35XBR88) (See page 22)

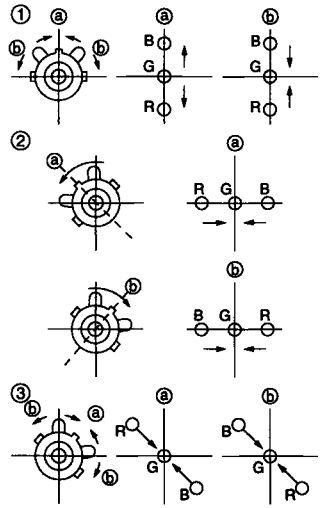
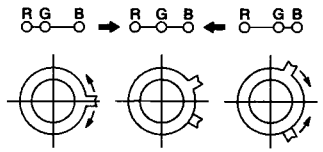
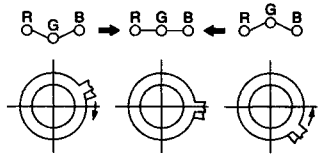
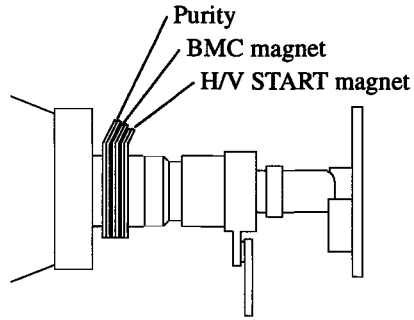


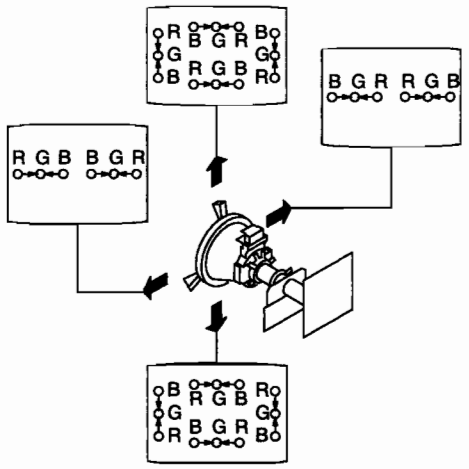
SECTION 3. SET-UP ADJUSTMENTS (See page 27-42)

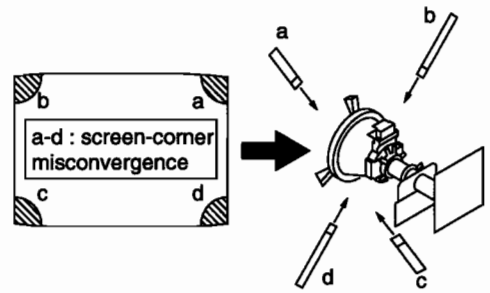
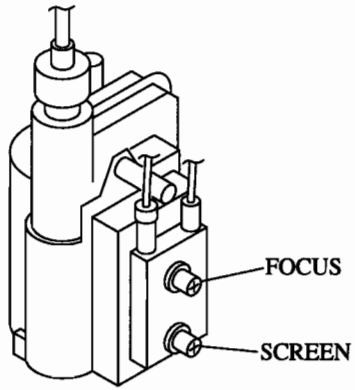
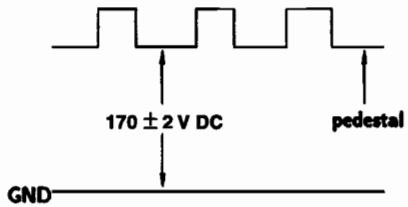
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
● The following adjustments should be made when a complete realignment is required or a new picture tube is installed. ● These adjustments should be performed with rated power supply voltage unless otherwise noted. The controls and switch should be set as follows unless otherwise noted : VIDEO MODE : STANDARD PICTURE control..... 100% BRIGHTNESS control..... 50% **Preparation:** ● Feed in the white pattern signal. (1) In order to reduce the influence of geomagnetism on the set's picture tube face it east or west. Note:Please do not use the hand degausser, because the hand degausser efects a spot on a CRT and magnetizes CRT around. **BEAM LANDING** 1. Input a *raster signal with the pattern generator. 2. Loosen the deflection yoke mounting screw, and set the *purity control to the center. 3. Turn the *raster signal of the pattern generator to green. 4. Move the *deflection yoke backward, and adjust with the purity control so that green is in the center and red and blue are at the sides evenly. 5. Move the deflection yoke forward, and adjust so that the entire screen becomes green.	Color bar Pattern Generator *White Pattern *Green Pattern		*Purity Control *Deflection Yoke	Purity control   

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
6. Switch over the raster signal to red and blue and confirm the condition. 7. When the position of the deflection yoke is determined, tighten it with the deflection yoke mounting screw. 8. When landing at the corner is not right, adjust by using the *disk magnets.			*Disk Magnets	

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
CONVERGENCE **Preparation:** ● Before starting, perform FOCUS, V. LIN and V. SIZE adjustments. ● Set BRIGHTNESS control to minimum. ● Feed in *signal. **(1) Horizontal and Vertical Static Convergence Adjustment** 1. Adjust *magnet to convergence red, green and blue dots in the center of the screen. (Vertical movement)	*Dot Pattern		*H/V. STAT Magnet	
				-Neck assy Position- 
●Tilt the *magnet and adjust static convergence to open or close the *magnet.			*V. STAT Magnet	

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
2. When the *magnet is moved in the direction of arrow ⓐ and ⓑ, red, green and blue dots move as shown below.			*V. STAT Magnet	
● Operation of *Magnet			*BMC Magnet	
● The respective dot positions resulting from moving each magnet interact, so be sure to perform adjustment while tracking. Use the V STAT tabs to adjust the red, green, and blue dots so they coincide at the center of screen (by moving the dots in the horizontal direction).				
● Y separation axis correction magnet adjustment 1. Receive a *signal, and adjust *PICTURE and BRIGHTNESS. 2. Adjust the deflection yoke to the upright condition when it hits the CRT. 3. Adjust so that the Y separation Axis correction magnet on the neck assembly is symmetrical at the top and bottom (open state). 4. Return the deflection yoke to its original position.	*Cross-hatch Pattern		*PICTURE ..... minimum BRIGHTNESS ..... normal	

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
(2) Dynamic Convergence Adjustment **Preparation:** ● Before starting perform Horizontal and Vertical static convergence Adjustment. 1. Slightly loosen deflection yoke screw. 2. Remove deflection yoke spacers. 3. Move the *deflection yoke for best convergence as shown below. 4. Tighten the deflection yoke screw. 5. Install the deflection yoke spacers.			*Deflection Yoke	

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
(3) Screen-corner Convergence Adjustment a–b : screen-corner misconvergence Affix a Permalloy ass'y corresponding to the misconverged areas			*SCREEN control (On FBT Ass'y) Permalloy Ass'y	 Permalloy assembly
FOCUS 1. Set to VIDEO mode = STANDARD, PICTURE = 100%. 2. Adjust *FOCUS control for best picture.			*FOCUS control (On FBT Ass'y)	 FBT
SCREEN (G2) 1. Input a *signal. 2. Adjust *PICTURE, BRIGHTNESS controls. 3. Adjust S BRT, G CUT, B CUT in service mode so that voltages on the red, green and blue *cathodes are *Voltage with an oscilloscope. 4. Observe the screen and adjust *SCREEN (G2)VR On FBT (Flyback transformer ass'y) to obtain the faintly visible background of dot signal.	*Dot pattern Oscilloscope	*cathodes	*PICTURE ..... normal *BRIGHTNESS ..... normal *S BRT *G CUT *B CUT *SCREEN (G2) (On FBT Assy)	*170 ± 2 V DC 

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER

WHITE BALANCE ADJUSTMENTS

	Disp.	Item	Ave. Data	
			32"/34"	35"/37"
VP	GDRV	Green Drive	38	37
	BDRV	Blue Drive	36	33
	GCUT	Green Cut-off	12	11
	BCUT	Blue Cut-off	10	9
	SBRT	Sub Bright	28	24

1. Input a *signal.
2. Set to service adjustment mode.
3. Set the PICTURE and BRIGHTNESS to *adjustment.
4. Adjust with *S BRT if necessary.
5. Select *G CUT and *B CUT with [1] and [4] .
6. Adjust with [3] and [6] for the best white balance.
7. Set the *PICTURE and BRIGHTNESS to *adjustment.
8. Select *G AMP and B AMP with [1] and [4] .
9. Adjust with [3] and [6] for the best white balance.
10. Write into the memory by pressing [MUTING] then [ENTER] .

*Entire White Pattern

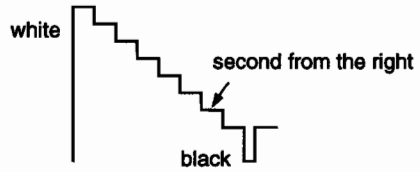
*PICTURE ..... minimum
BRIGHTNESS ..... minimum
*S BRT
*G CUT
*B CUT
*PICTURE ..... maximum
BRIGHTNESS ..... maximum
*G DRV
B DRV

SUB BRIGHT ADJUSTMENT

1. Set to service adjustment mode.
2. Input a *signal.
3. Select SBRT with [1] and [4] , and adjust SUB BRIGHT level with [3] and [6] so that the stripe second from the right is dimly lit.
4. Write into the memory by pressing [MUTING] then [ENTER] .

*Grey scale pattern

*PICTURE ..... minimum
BRIGHTNESS ..... normal
SBRT



ELECTRICAL ADJUSTMENTS BY REMOTE COMMANDER

Use of Remote Commander (RM-Y144) can be performed circuit adjustments about this model.

NOTE : Test Equipment Required.

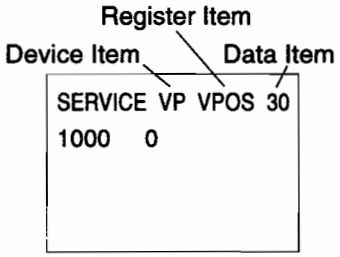
1. Pattern Generator
2. Frequency counter
3. Digital multimeter
4. Audio OSC

1. METHOD OF SETTING THE SERVICE ADJUSTMENT MODE

SERVICE MODE PROCEDURE

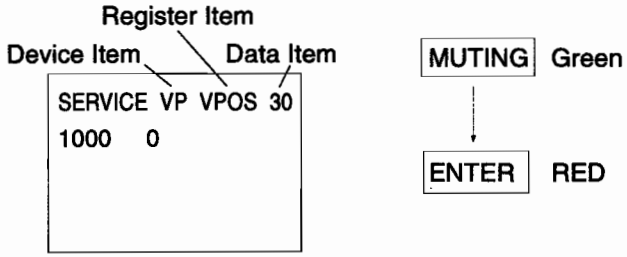
1. Standby mode. (Power off)
2. [DISPLAY] → [5] → [VOL (+)] → [POWER] on the Remote Commander. (Press each button within a second.)

SERVICE ADJUSTMENT MODE IN



3. The CRT displays the item Being adjusted.
4. Press [2]or [5] on the Remote Commander to select the device item.
5. Press [1] or [4] on the Remote Commander to select the item.
6. Press [3] or [6] on the Remote Commander to change the data.
7. If you want to recover the latest values press [0] then [ENTER] to lead the memory.
8. Press [MUTING] then [ENTER] to write into memory.

SERVICE ADJUSTMENT MODE MEMORY



8. Press [8] then [ENTER] on the Remote Commander to reset.

Carry out step 8) when adjusting IDs 0 to 4 and when replacing and adjusting IC102.

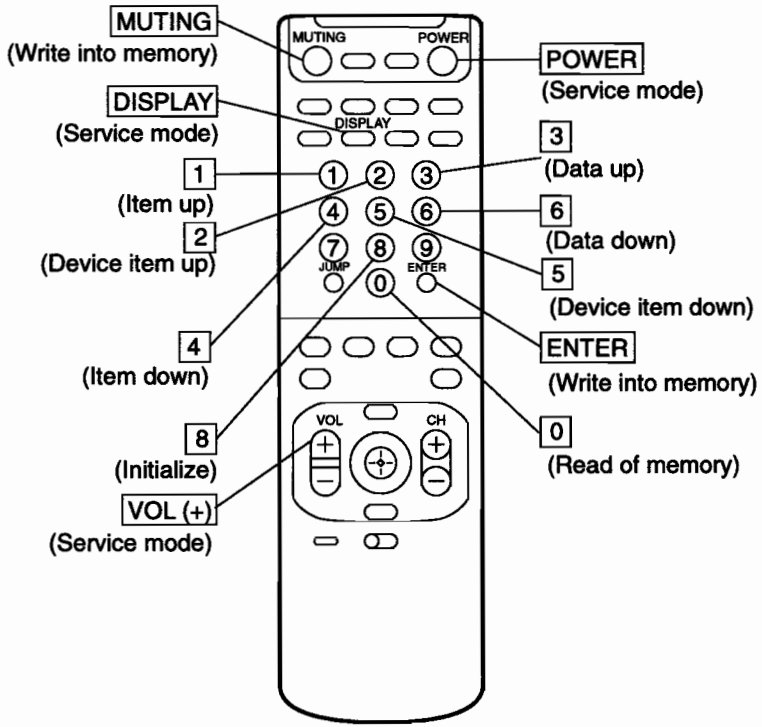
Factory original setting

9. Turn set off and on to exit.

2. MEMORY WRITE CONFIRMATION METHOD

1. After adjustment, pull out the plug from AC outlet, and next place, plug in AC outlet again.
2. Turn the power switch ON and set to Service Mode.
3. Call the adjusted items again, confirm they were adjusted.

3. ADJUST BUTTONS AND INDICATOR



SERVICE DATA

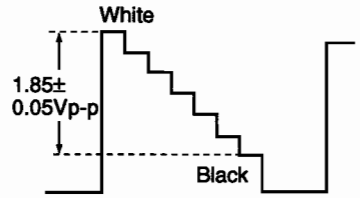
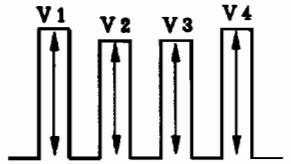
	Discriptions	Device	Resistor Name	Data Length	Initial Data	Avarage Data		Comment
						32"/34"	35"/37"	
VP	VPOS	CXA2025S	V-Position	0-63	20	23	12	Adjust
	VSIZ		V-Size	0-63	20	34	37	Adjust
	VCOM		V-Compensation	0-3	1	1	1	Fix
	VLIN		V-Linearity	0-15	7	8	7	Adjust
	VSCO		S-Correcttion	0-15	7	7	7	Adjust
	HPOS		H-Position	0-15	7	10	12	Adjust
	HSIZ		H-Size	0-63	20	36	36	Adjust
	PAMP		PIN-Compensation	0-63	31	28	27	Adjust
	UPIN		Upper-CornerPin	0-15	7	7	7	Adjust
	LPIN		Lower-CornerPin	0-15	7	7	7	Adjust
	PPHA		Pin-Phase	0-15	7	5	5	Adjust
	AFC		AFC	0-3	2	2	2	Fix
	VBOW		AFC-Bow	0-15	7	5	6	Adjust
	VANG		AFC-Angle	0-15	7	8	7	Adjust
	REF		Reference-Position	0-3	2	1	1	Fix
	GDRV		Green-Drive	0-63	31	38	37	Adjust
	BDRV		Blue-Drive	0-63	31	36	33	Adjust
	GCUT		Green-Cutoff	0-15	7	12	11	Adjust
	BCUT		Blue-Cutoff	0-15	7	10	9	Adjust
	SCON		Sub-Contrast	0-15	7	9	10	Adjust
	SHUE		Sub-Hue	0-15	7	4	2	Adjust
	SCOL		Sub-Color	0-15	7	6	6	Adjust
	SBRT		Sub-Brightness	0-63	31	28	24	Adjust
	SSHP		Sub-Sharpness	0-15	7	7	7	Fix
	CDM2		Countdown Mode 2	0-1	1	1	1	Fix
	DPIX		Dynamic-Picture	0, 1	1	1	1	Fix
	Y-DC		DC-Transmission	0, 1	1	1	1	Fix
	ABLM		ABL	0, 1	1	1	1	Fix
	NOTC		Chroma Trap	0, 1	0	0	0	Fix
	CROM		Chroma Trap-Adjust	0-15	7	7	7	Fix
	TOT		TOT-Filter	0, 1	1	1	1	Fix
	PREL		Pre/Over-Shoot	0-3	3	0	0	Fix
	SHPF		Sharpness-f0	0-3	2	2	2	Fix
	RON		Red-Off	0, 1	1	1	1	Fix
	GON		Green-Off	0, 1	1	1	1	Fix
	BON		Blue-Off	0 , 1	1	1	1	Fix
	CDMD		V-Countdown	0, 1	0	0	0	Fix
	HBSW		H Blanking Switch	0, 1	1	0	0	Fix
	LBLK		Left Blanking	0-15	2	7	7	Fix
	RBLK		Right Blanking	0-15	7	7	7	Fix
AP	SVOL	BH3856FS	Sub-Volume	0-15	0	0	0	Fix
	SBAL		Sub-Balance	0-15	7	7	7	Fix

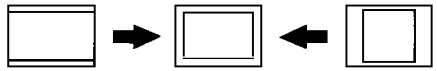
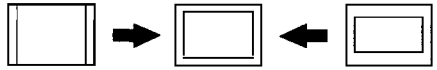
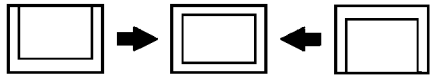
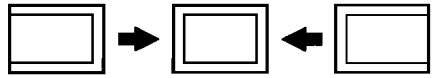
	Discriptions	Device	Resistor Name	Data Length	Initial Data	Avarage Data		Comment
						32″/34″	35″/37″	
	SBAS		Sub-Bass	0-15	7	6	4	32″/34″ : 6 35″/37″ : 4
	STRE		Sub-Treble	0-15	7	9	9	Fix
3D	CGAN	µPD6488	CGAIN	0, 1	1	1	1	Fix
	AVAP		AVAPON	0, 1	1	1	1	Fix
	MS		MS0/MS1	0-2	0	0	0	Fix
	YDLL		YDELAY-L	0-7	2	2	2	Fix
	HRD8		HRD08	0, 1	0	0	0	Fix
	HRD7		HRD00-07	0-255	12	12	12	Fix
	DYCO		DYCOR	0-15	5	5	5	Fix
	DYGA		DYGAIN	0-15	8	8	8	Fix
	DCCO		DCCO	0-15	3	3	3	Fix
	DCCG		DCGAIN	0-15	7	7	7	Fix
	VTR0		VTR0/VTR1	0-2	0	0	0	Fix
	VTRH		VTRH	0-2	2	2	2	Fix
	VTRR		VTRR	0-15	7	7	7	Fix
	SELJ		SELJ	0, 1	1	1	1	Fix
	HSDR		HSDR	0-15	7	7	7	Fix
	WSCO		WSCOR	0-15	15	15	15	Fix
	LSDR		LDSREF	0-15	7	7	7	Fix
	WSD1		WSDR1	0-15	15	15	15	Fix
	WSD2		WSDR2	0-15	15	15	15	Fix
	VAPG		VAPGAIN	0-7	4	4	4	Fix
	VAPI		VAPINV	0-31	15	15	15	Fix
	MOTÉ		MDTES	0, 1	0	0	0	Fix
	YTM8		YTM87	0, 1	0	0	0	Fix
	DYTR		DYTRAP	0, 1	1	1	1	Fix
	VHG		VHG	0-3	3	3	3	Fix
	YH87		YH87	0, 1	0	0	0	Fix
	YSG		YSG	0, 1	1	1	1	Fix
	YTG		YTG	0-3	1	1	1	Fix
	VTMR		VTMREF	0-15	12	12	12	Fix
	VHRE		VHREF	0-15	11	11	11	Fix
	YT1R		YT1REF	0-15	2	2	2	Fix
	CT2Y		CT2YT	0, 1	0	0	0	Fix
	CTG		CTG	0-3	1	1	1	Fix
	CTMR		CTMREF	0-15	10	10	10	Fix
	CT2R		CT2REF	0-15	10	10	10	Fix
	CT1R		CT1REF	0-15	7	7	7	Fix
PI	SHPR	TA1226N	Sharpness	0-127	59	59	59	Fix
	SRTS		SRT Start Position	0, 1	3	3	3	Fix
	GIRE		Gamma Start Point	0-3	3	3	3	Fix
	GCUR		Gamma Curve	0, 1	0	0	0	Fix
	RS		RS	0-7	0	0	0	Fix
	RTC		RTC	0-7	4	4	4	Fix

	Discriptions	Device	Resistor Name	Data Length	Initial Data	Avarage Data		Comment
						32″/34″	35″/37″	
PP	SMT6	SAB9076	SMART6	0, 1	1	1	1	Fix
	SKIP6		SKIP6	0, 1	0	0	0	Fix
	BGHP		BGhfp	0-15	9	7	6	Adjust
	BGVP		BGvfp	0-15	8	8	6	Adjust
	MAHP		MAhfp	0-15	7	6	5	Adjust
	MAVP		MAvfp	0-255	24	24	24	Adjust
	SAHP		SAhfp	0-15	3	3	3	Fix
	SAVP		SAvfp	0-255	24	24	24	Fix
	VPED		PedestV	0-15	0	14	14	Fix
	UPED		PedestU	0-15	0	14	14	Fix
	MDEC		16h , bit0-4	0-32	18	18	18	Fix
	SDEC		15h , bit0-4	0-32	16	16	16	Fix
	DISS		17h , bit0-7	0-126	2	2	2	Fix
	BSIZ		---	0-255	34	34	34	Fix
	POFH		---	0-15	11	11	11	Fix
	POFV		---	0-15	6	6	6	Fix
	DHPS		Display H Position Start	0-15	3	3	3	Fix
	P&PV		SDhfp , MDhfp under P&P	0-255	62	62	62	Fix
	BBR0		---	0-3	1	1	1	Fix
	BCL0		---	0-7	7	7	7	Fix
	BBR2		---	0-3	2	2	2	Fix
	BCL2		---	0-7	6	6	6	Fix
	BBR3		---	0-3	0	0	0	Fix
	BCL3		---	0-7	7	7	7	Fix
MC	MHUE	CXA2019	HUE	0-63	26	26	26	Fix
	MCOL		COLOR	0-63	38	35	35	Fix
	MSCO		SUB CONT	0-15	7	7	6	Adjust
	MSCL		SUB COLOR	0-15	7	7	5	Adjust
	MSHU		SUB HUE	0-15	7	7	9	Adjust
	MTOT		TOT ON	0, 1	1	1	1	Fix
	MTRP		TRAP ON	0, 1	0	0	0	Fix
	MTRA		CTRAPADJ	0-15	7	7	7	Fix
	MCD2		CD MODE2	0, 1	1	1	1	Fix
	MFSC		FSC OUT	0, 1	1	1	1	Fix
	MYDR		Y DRIVE	0-31	24	22	22	Fix
	MVPE		V PED	0-15	7	7	8	Adjust
	MUPE		U PED	0-15	7	7	6	Adjust
	MRVP		RV PED	0-15	7	7	7	Fix
	MRUP		RU PED	0-15	7	7	7	Fix
	MDCT		DC TRAN	0-7	0	0	0	Fix
	MRYD		RY DRIVE	0-31	31	31	31	Fix
	MPRE		PRE OVER	0-3	0	0	0	Fix
	MRUD		RU DRIVE	0-31	15	15	15	Fix

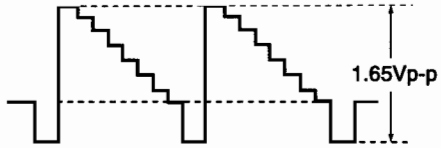
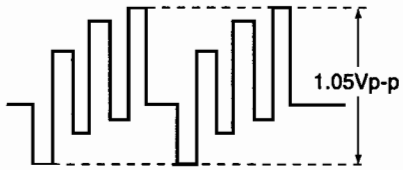
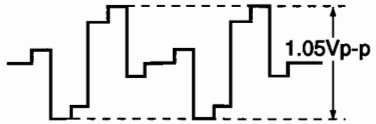
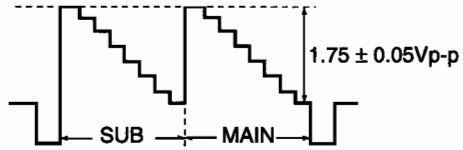
	Discriptions	Device	Resistor Name	Data Length	Initial Data	Avarage Data		Comment
						32"/34"	35"/37"	
	MRVD		RV DRIVE	0-31	15	15	15	Fix
	MDLY		DELAY	0-3	0	0	0	Fix
	MSCR		SCP BGR	0-3	1	1	1	Fix
	MSCF		SCP BGF	0-3	1	1	1	Fix
IC	ICYC	CXA2019	CV/YC	0, 1	1	1	1	Fix
	IHUE		HUE	0-63	24	24	24	Fix
	ICOL		COLOR	0-63	38	37	37	Fix
	ISCO		SUB CONT	0-15	7	6	5	Adjust
	ISCL		SUB COLOR	0-15	7	7	4	Adjust
	ISHU		SUB HUE	0-15	7	7	9	Adjust
	ITOT		TOT ON	0, 1	1	1	1	Fix
	ITRP		TRAP ON	0, 1	0	0	0	Fix
	ITRA		CTRAPADJ	0-15	7	7	7	Fix
	ICD2		CD MODE2	0, 1	1	1	1	Fix
	IYDR		Y DRIVE	0-31	26	24	24	Fix
	IVPE		V PED	0-15	7	7	7	Adjust
	IUPE		U PED	0-15	7	7	5	Adjust
	IRVP		RV PED	0-15	7	7	7	Fix
	IRUP		RU PED	0-15	7	7	7	Fix
	IDCT		DC TRAN	0-7	0	0	0	Fix
	IRYD		RY DRIVE	0-31	31	31	31	Fix
	IPRE		PRE OVER	0-3	0	0	0	Fix
	IRUD		RU DRIVE	0-31	15	15	15	Fix
	IRVD		RV DRIVE	0-31	15	15	15	Fix
	IDLY		DELAY	0-3	0	0	0	Fix
	ISCR		SCP BGR	0-3	1	1	1	Fix
	ISCF		SCP BGF	0-3	1	1	1	Fix
DA	RTCO	CXA1315	DAC0 (Rotation Coil)	0-63	32	32	32	Fix
	2HUE		DAC1 (CXA2039 Hue)	0-63	32	(24)	(24)	Adjust
	2COL		DAC2 (CXA2039 COL)	0-63	32	(31)	(31)	Adjust
CC	CRIH	CXP85856A		0-15	9	9	9	Fix
	CRIL			0-15	2	2	2	Fix
	CFLD			0-15	5	5	5	Fix
	CCDI			0-7	3	3	3	Fix
	CRIP			0-7	4	4	4	Fix
	CRIT			0-3	1	1	1	Fix
	CSB1			0-3	3	3	3	Fix
	CSB2			0-7	4	4	4	Fix
	CCBD			0-15	4	4	4	Fix
	CCFD			0-63	7	7	7	Fix
	CREP			0-256	142	142	142	Fix
	CSEP			0-256	186	186	186	Fix
	CRBD			0-15	8	8	8	Fix

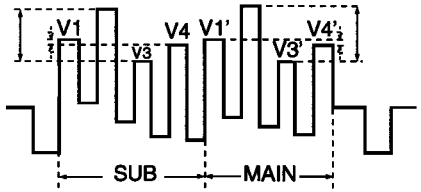
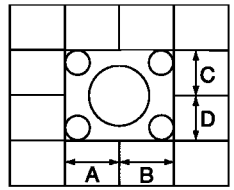
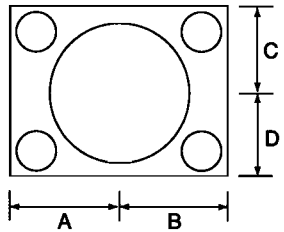
	Discriptions	Device	Resistor Name	Data Length	Initial Data	Avarage Data		Comment
						32″/34″	35″/37″	
	CRFD			0-15	9	9	9	Fix
	CSSD			0-15	3	3	3	Fix
	CSED			0-15	9	9	9	Fix
	CSBS			0-31	12	12	12	Fix
	CDSD			0-31	8	8	8	Fix
	CCDS			0-31	9	9	9	Fix
	CHMK			0-63	42	42	42	Fix
	CHSY			0-255	136	136	136	Fix
OP	DISP	CXP85856A	OSD Position	0-63	1	(38)	(38)	0 : Not Available , 1 : Left , 63 : Right
	PDPS		PIP Display Position Start	0-63	1	(35)	(35)	0 : Not Available , 1 : Left , 63 : Right
	PDP0		PIP Display Position 0	0-3	0	(1)	(1)	Shift to Right by 1 font
	PDP1		PIP Display Position 1	0-7	0	(4)	(4)	Shift to Right by 1 font
	PDP2		PIP Display Position 2	0-7	0	(4)	(4)	Shift to Right by 1 font
	KILS		Color Killer SW	0, 1	1	1	1	0 : Not Available , 1 : Available
ID	ID-0	ID	ID-0	0-255	25	25	25	Fix
	ID-1		ID-1	0-255	63	63	63	Fix
	ID-2		ID-2	0-255	47	47	47	Fix
	ID-3		ID-3	0-255	0	0	0	Fix
	ID-4		ID-4	0-255	155	27	155	32″/34″ : 27 35″/37″ : 155
	ID-5		ID-5	0-255	143	143	143	Fix
	ID-6		ID-6	0-255	6	6	6	Fix
	ID-7		ID-7	0-255	32	32	32	Fix

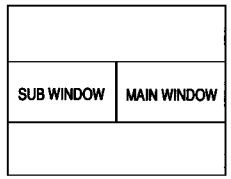
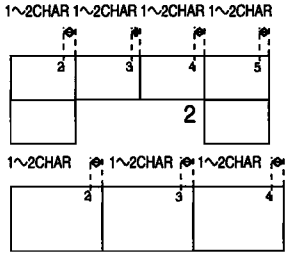
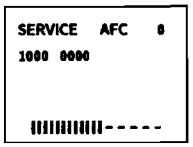
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
SUB CON ADJUSTMENT (SCON) 1. Input a *signal. 2. Set to VIDEO mode = STANDARD, COLOR = minimum, PICTURE = 100%. " G ON " = " 0 " (OFF), " B ON " = " 0 " (OFF). 3. Set to Service adjustment Mode and Connect an *oscilloscope pin ① of CN351. 4. Select " SCON " with [1] and [4] . 5. Adjust with [3] and [6] for the 1.85 ± 0.05Vp-p of level. 6. Write into the memory by [MUTING] then [ENTER] .	*75%Color-bar pattern	*CN351 Pin ① (C board)	G ON, B ON SCON	ILLUSTRATION AND SHAPE AND NUMBER 
SUB HUE, SUB COLOR ADJUSTMENT (SHUE, SCOL) 1. Input a *signal. 2. Set to VIDEO mode = STANDARD, picture = 100%, color = 50%, HUE = 50%. 3. Set to Service adjustment Mode and connect an *oscilloscope *Connector Pin (B OUT) of C board. 4. Select " SHUE " and " SCOL " with [1] and [4] . 5. Adjust with [3] and [6] for the V1 = V4 (SCOL) and V2 = V3 (SHUE). 6. After adjust write " SHUE " data 1 step down. 7. Write into the memory by pressing [MUTING] then [ENTER] .	*Color-bar pattern *Oscilloscope	*CN351 Pin ③ (C board)	SHUE, SCOL SHUE	

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
H SIZE ADJUSTMENT (HSIZ) 1. Input a *signal. 2. Set to Service adjustment Mode. 3. Select " HSIZ " with [1] and [4] . 4. Adjust with [3] and [6] for the best Horizontal size. 5. Write into the memory by pressing [MUTING] then [ENTER] .	*Monoscope pattern		HSIZ	H. SIZE 
V. SIZE ADJUSTMENT (VSIZ) 1. Input a *signal. 2. Set to Service adjustment Mode. 3. Select " VSIZ " with [1] and [4] . 4. Adjust with [3] and [6] for the best vertical size. 5. Write into the memory by pressing [MUTING] then [ENTER] .	*Monoscope pattern		VSIZ	V. SIZE 
V. POSITION ADJUSTMENT (VPOS) 1. Input a *signal. 2. Set to Service adjustment Mode. 3. Select " VPOS " with [1] and [4] . 4. Adjust with [3] and [6] for the best vertical center. 5. Write into the memory by pressing [MUTING] then [ENTER] .	*Monoscope pattern		VPOS	V. POSITION 
H. POSITION ADJUSTMENT (H POS) Note : Perform this adjustment after H. FREQUENCY ADJUSTMENT (HFRE). 1. Input a *signal. 2. Set to Service adjustment Mode. 3. Select " HPOS " with [1] and [4] . 4. Adjust with [3] and [6] for the best horizontal center. 5. Write into the memory by pressing [MUTING] then [ENTER] .	*Monoscope pattern		HPOS	H. POSITION 

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
V LINEARITY (VLIN), V CORRECTION (VSCO), PIN AMP (PAMP) PIN PHASE (PPHA) AND OTHER ITEM ADJUSTMENTS 1. Input a *signal. 2. Set to Service adjustment Mode. 3. Select VLIN, VSCO, PAMP, PPHA and other item with [1] and [4] . 4. Adjust with [3] and [6] for the best picture. 5. Write the memory by Pressing [MUTING] then [ENTER] .	*Cross-hatch pattern		VLIN VSCO PAMP PPHA VANG VBOW UPIN LPIN	V LINEARITY VS CORRECTION PIN AMP PIN PHASE V ANGLE V BOW UPPER PIN LOW PIN

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
A BOARD **Y/B–Y/R–Y LEVEL ADJUSTMENT** 1. Set to VIDEO mode = STANDARD, PICTURE = 100%, COLOR = 50%, HUE = 50% 2. Set a select Video 4 (DVD) Mode. 3. Input a * signal. 4. Connect an* oscilloscope* CN351 pin ③ on A board. 5. Set to Service Mode and select " 2COL " and " 2HUE " with [1] and [4]. 6. Adjust with [3] and [6] for " 2COL " and " 2HUE " so that even flat signal. 7. After adjust write " 2HUE " data 4 steps down. 8. Write into the memory by pressing [MUTING] then [ENTER].	*75% Color-bar pattern *oscilloscope	*CN351 pin ③ (A board)	2COL, 2HUE 2COL, 2HUE 2HUE	[75Ω open level] Y LEVEL (INPUT)  B-Y LEVEL (INPUT)  R-Y LEVEL (INPUT) 
P&P SUB CONTRAST ADJUSTMENT (MSCO, ISCO) 1. Input a *signal. 2. Set to VIDEO mode = STANDARD, PICTURE = 100%, COLOR = minimum, " GON " = " 0 " (OFF), " BON " = " 0 (OFF). 3. Set P&P mode. 4. Connect an* oscilloscope* CN1103 pin ⑥ of A board and GND. 5. Set to Service Mode and select " MSCO " (main window) and " ISCO " (sub window) with [1] and [4]. 6. Adjust with [3] and [6] for the 1.75 ± 0.05Vp-p of level. 7. Write into the memory by pressing [MUTING] then [ENTER].	*75%Color-bar pattern *Oscilloscope	*CN1103 Pin ⑥ (A board)	G ON, B ON MSCO ISCO	

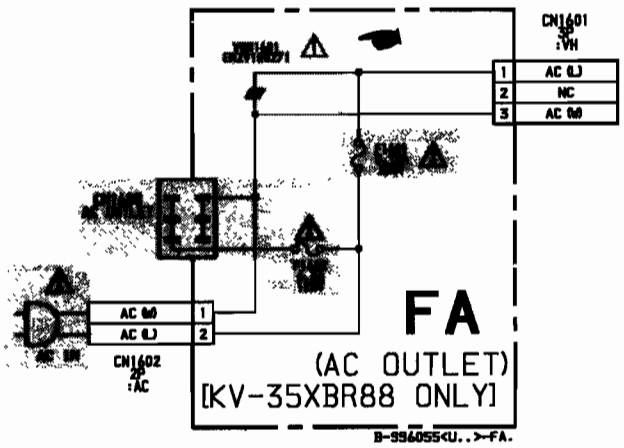
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
P&P SUB COLOR, SUB HUE ADJUSTMENT (MCOL, MSHU, ICOL, ISHU) 1. Input a *signal. 2. Set to VIDEO mode = STANDARD, PICTURE = 100%, COLOR = 50%, HUE = 50%. 3. Set P&P mode. 4. Connect an* oscilloscope* CN1103 pin ⑦ of A board and GND . 5. Set to Service Mode and select " MCOL " , " MSHU " (main window) and " ICOL ", " ISHU " (sub window) with [1] and [4] . 6. *Adjust with [3] and [6] . 7. After adjust write " MSHU " and " ISHU " data 1 step down. 8. Write into the memory by pressing [MUTING] then [ENTER] .	*75%Color-bar pattern *Oscilloscope	*CN1103 Pin ⑦ (A board)	MCOL, MSHU ICOL, ISHU MSHU, ISHU	 * SUB COLOR V1–V4 = ±0.1V V1'–V4'= ±0.1V SUB HUE V3–V2 = ±0.1V → 1 STEP DOWN V3'–V2'= ±0.1V → 1 STEP DOWN
P&P ACQUISITION ADJUSTMENT (MAHP, MAVP) 1. Input a *signal. 2. Set to PICTURE = 100%. 3. Set CHANNEL INDEX mode. 4. Set to Service Mode and select " MAHP " " MAVP " with [1] and [4] . 5. Adjust with [3] and [6] for the best* center (main window). 6. Write the memory by pressing [MUTING] then [ENTER] .	*Monoscope pattern		MAHP, MAVP	NEED TO ADJUST AFTER GEOMETRIC ADJUST  A–B = ±0.2 sg C–D = ±0.2 sg
BACKGROUND POSITION ADJUSTMENT (BGHP, BGVP) 1. Input a *signal. 2. Set to VIDEO mode = STANDARD. 3. Freeze a main picture. 4. Set to Service Mode and select " BGHP " , "BGVP " with [1] and [4] . 5. Adjust with [3] and [6] for the best* center. 6. Write into the memory by pressing [MUTING] then [ENTER] . Note : Before this 「P&P ACQUISITION ADJUSTMENT」 must be done.	*Monoscope pattern		BGHP, BGVP	FREEZED •NEED TO ADJUST AFTER P&P (MAIN) ACQUISITION ADJUST  A–B = ±0.2 sg C–D = ±0.2 sg

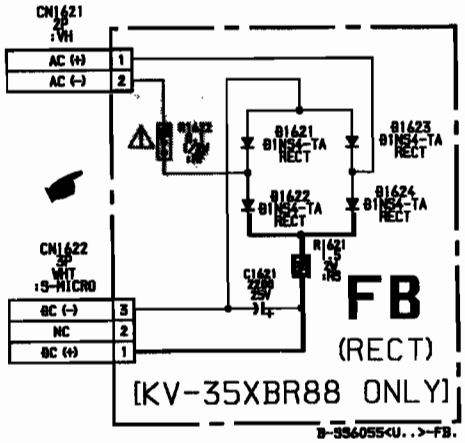
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
P&P WHITE BALANCE ADJUSTMENT (MUPE, MVPE, IUPE, IVPE) 1. Input a *signal. 2. Set to VIDEO mode = STANDARD. 3. Set to P&P mode. 4. Set to Service Mode and select " MUPE " " MVPE " (main window), "IUPE " " IVPE (sub window) with [1] and [4] . 5. Adjust with [3] and [6] for white balance. 6. Write into the memory by pressing [MUTING] then [ENTER] .	*40 IRE WHITE pattern		MUPE, MVPE IUPE, IVPE	NEED TO ADJUST AFTER MAIN PICTURE (NOT P&P) W/B ADJUST  * 9300°K + 8MPCD
P&P OSD ADJUSTMENT (PDPS) 1. Input a *signal. 2. Set to channel INDEX mode. 3. Adjust for right side edge of P&P OSD is there for 1∼2char from border. ADJUST……PDPS (OP) If necessary, adjust " PDP 0 " " PDP 1 " " PDP 2 " 4. Push the P&P off. 5. Push the return key for favorite ch. 6. Confirm 1∼2char distance. 7. Write the memory by pressing [MUTING] then [ENTER] .	*Monoscope pattern		PDPS PDP0, PDP1 PDP2	 ⇔: CRT Usable Area.
OSD POSITION ADJUSTMENT (DISP) 1. Input a *signal. 2. Set to Service adjustment Mode. 3. Select " DISP " with [1] and [4] . 4. Adjust with [3] and [6] for the bar center. 5. Write into the memory by pressing [MUTING] then [ENTER] .	*Color-bar pattern		DISP	

SECTION 5. DIAGRAMS

5-3. PRINTED WRING BOARDS AND SCHEMATIC DIAGRAMS

(See page 90)





SECTION 7. ELECTRICAL PARTS LIST

FA BOARD, COMPLETE (KV-35XBR88) (See page 115)

REF. NO.	PART NO.	DESCRIPTION	REMARK
		<VARISTORTOR>	
VDR1601	⚠1-801-074-41	VARISTOR ERZV10D271	

FB BOARD, COMPLETE (KV-35XBR88) (See page 116)

REF. NO.	PART NO.	DESCRIPTION	REMARK
R1622	⚠ 1-202-933-61	FUSIBLE 0.1 10% 1/2W F	

MISCELLANEOUS (See page 116)

REF. NO.	PART NO.	DESCRIPTION	REMARK
	⚠ 1-431-520-11	TRANSFORMER, POWER (KV-35XBR88)	